



Crafts, Construction,  
and Industrial Arts

JANUARY 1959/SEVENTY CENTS

# SCHOOL ARTS

# IMAGINATION



THE  
CRAYOLA®  
MAKERS



380 Madison Ave.,  
New York 17, N. Y.



NAAE SUPPORTING MEMBER

ARTICLES INDEXED IN READERS GUIDE TO PERIODICAL LITERATURE AND EDUCATION INDEX. MICROFILM COPIES AVAILABLE FROM UNIVERSITY MICROFILMS, ANN ARBOR, MICHIGAN. MEMBER, EDUCATIONAL PRESS ASSOCIATION OF AMERICA. MEMBER, AUDIT BUREAU OF CIRCULATIONS.

D. KENNETH WINEBRENNER, Editor  
Professor of Art, State University College for Teachers at Buffalo

ROBERT SQUERI, Assistant Editor

CLEMENT TETKOWSKI, Assistant Editor

RITA A. FRITSCH, Editorial Secretary

Send all editorial mail to 400 Woodland Drive, Buffalo 23, New York

Send all business mail to Printers Building, Worcester 8, Massachusetts

#### Advisory Editors

- MANUEL BARKAN, Head, Art Education  
The Ohio State University, Columbus, Ohio
- ALICE BAUMGARNER, Director of Art Education  
State of New Hampshire, Concord, New Hampshire
- RALPH G. BEELKE, Executive Secretary  
National Art Education Association, Washington, D. C.
- FELICIA BEVERLEY, Supervisor of Art Education  
New Castle County, Wilmington, Delaware
- MAYO BRYCE, Specialist, Fine Arts Education  
U. S. Office of Education, Washington, D. C.
- DOROTHY CALDER, Art Teacher  
Decatur High School, Decatur, Georgia
- HOWARD CONANT, Chairman, Department of Art Education  
New York University, New York
- SISTER MARY CORITA, I.H.M., Artist, Art Educator  
Immaculate Heart College, Los Angeles, California
- VICTOR D'AMICO, Director, Department of Education  
Museum of Modern Art, New York City
- ITALO L. de FRANCESCO, Director of Art Education  
State Teachers College, Kutztown, Pennsylvania
- HOWARD DIERLAM, Supervisor of Art  
City of Toronto, Ontario, Canada
- C. D. GAITSKELL, Director of Art  
Province of Ontario, Toronto, Canada
- ROBERT D. GOLDMAN, Head, Fine and Industrial Arts  
Abraham Lincoln High School, Philadelphia, Pennsylvania
- ROBERT IGLEHART, Head, College of Architecture and Design  
University of Michigan, Ann Arbor, Michigan
- JEAN JOHNSON, Supervisor of Art Education  
Dade County, Miami, Florida
- PAULINE JOHNSON, Professor of Art  
University of Washington, Seattle, Washington
- ELIZABETH MACK, Director of Art  
City of Charlotte, North Carolina
- MARY ADELINE McKIBBIN, Director of Art  
City of Pittsburgh, Pennsylvania
- EUGENIA C. NOWLIN, Technical Adviser for Crafts, Special Services  
Adjutant General's Office, Dept. of the Army, Washington, D.C.
- ARNE W. RANDALL, Chairman, Art Department  
Texas Technological College, Lubbock, Texas
- RUTH REEVES, Artist, Designer, Teacher  
443 Lafayette Street, New York City
- PAULI TOLMAN, Supervisor of Art  
City of Los Angeles, California
- EDWIN ZIEGFELD, Head, Fine and Industrial Arts  
Teachers College, Columbia University, New York City

#### Business Department

- PAUL GOWARD, Business Manager
- WILLIAM B. JENNISON, Advertising Manager
- INEZ F. DAVIS, Subscription Manager

#### Advertising Representative

Midwestern: Dwight Early and Sons, 100 N. LaSalle Street,  
Chicago 2, Illinois. Phone CEntal 6-2184

SUPPORTING MEMBER, NATIONAL ART EDUCATION ASSOCIATION

Cover by Roger Reuillard, student of Don Nichols at Albright Art School. This is a department of the University of Buffalo.

VOLUME 58, NUMBER 5 / JANUARY 1959

# SCHOOL ARTS

the art education magazine

## Crafts, Construction, and Industrial Arts

### SPECIAL ARTICLES

- 3 Those Freeing Sentences, by Natalie R. Cole
- 7 Using Foam Glass for Sculpture, by Olaf S. Fjelde
- 11 Training for Industrial Design, by Leon Gordon Miller
- 15 A New Look at Industrial Arts, by William A. Bakamis
- 19 Art as Industry's Ally, by F. C. Livingstone
- 23 Making People Out of Bottles, by Joyce Nill Truebig
- 25 Exploring with Wood, by Josephine R. Krum
- 29 Human Figures Can Be Sausage Shapes, by Ralph M. Pearson
- 31 A New Scratch Technique, by Maria K. Gerstman
- 31 Making Aluminum Mobiles, by George C. Lindemer
- 32 Worcester Craft Center, by the Editor

### REGULAR FEATURES

- 2 Using This Issue
- 2 News Digest
- 33 Issues of the Day
- 34 Items of Interest
- 38 Understanding Art, by Evarts Erickson
- 42 Letters to the Editor
- 43 Beginning Teacher, by Julia Schwartz
- 44 Art Films, by Thomas Larkin
- 45 New Teaching Aids, by Edmund B. Feldman
- 47 Questions You Ask, by Alice A. D. Baumgarner
- 48 Editorial, Pretending You Know

Copyright 1958 by Davis Publications, Inc. All rights reserved. The title School Arts is registered in U. S. Patent Office. Published monthly ten times a year, September through June. Publishing, business, advertising and subscription offices: Printers Building, Worcester 8, Massachusetts. Editorial office: 400 Woodland Drive, Buffalo 23, New York. Second-class postage paid at Worcester, Massachusetts. Subscription rates: United States, \$6.00 a year. Foreign, \$6.65. In Canada, \$6.00 through Wm. Dawson Subscription Service Limited, 587 Mount Pleasant Road, Toronto 12, Ontario, Canada. Copies of back issues when available, 75 cents each—payment with order. School Arts will not knowingly insert advertisements from other than reliable firms, nor will it willingly publish either articles or advertisements which advocate procedures contrary to generally accepted principles of art education. Manuscripts and illustrations dealing with creative art activities are welcome at all times and should be addressed to the Editorial Office. Whenever possible, sharp glossy photographs of original art work should be sent instead of the actual objects, except where the work is small and two-dimensional. Manuscripts should be typed double-spaced and range from 250 to 1000 words. Although every precaution is taken to safeguard material submitted, the publishers cannot be responsible for loss or injury. Remuneration is based on the educational value of the material. A folder with suggestions for writers may be obtained from the Editorial Office in Buffalo.



# using this issue

A famous classroom teacher, Natalie Cole, tells us how she stimulates creative art by the things she says while the children work, page 3. There are several articles dealing with crafts and construction at various levels. A teacher of industrial arts discusses new concepts in that area, on page 15, while the Issues of the Day, page 33, debates the value of a joint department of art and industrial arts. An industrial designer discusses this field, page 11, and a British author discusses what that country is doing to improve design in manufactured products, page 19. Charles Burchfield is featured in *Understanding Art*, page 38. Julia Schwartz discusses perspective, page 43; Alice Baumgartner answers some difficult questions on page 47. If you are still with us at the end, you will find the editorial on "Pretending You Know." Next month's issue will include the annual Buyers' Guide many readers look forward to each year.

## NEWS DIGEST

*Dr. Mayo Bryce, art specialist, U.S. Office of Education.*



**Mayo Bryce Goes to Washington** Dr. Mayo Bryce, recently president of the Pacific Arts Association, left his position as professor at San Francisco State College to become specialist in education in the arts for the United States Office of Education a few weeks ago. Dr. Bryce succeeds Dr. Ralph Beelke, who resigned the position to become the first executive secretary of the National Art Education Association. His doctor of education degree is from Teachers College, Columbia University. Widely known and respected in the profession, Dr. Bryce was chairman of the art department at the University of Alabama before his war service as field director of the American Red Cross at San Francisco. He joined the San Francisco college faculty in 1948. In 1957 he planned and moderated a series of television programs sponsored by the Ford Foundation, and served as leader of a workshop summer program developed jointly by his college and the University of Paris. He attended the second general assembly of the International Society for Education Through Art as a representative of the United States. Dr. Bryce has consented to serve as an advisory editor of *School Arts*, and we look forward to co-operating with him in his new position. Congratulations!

**Neutra to Address NCAE** Richard Neutra will be a major speaker at the seventeenth annual conference of the National Committee on Art Education, to be held at the University of Wisconsin, April 29-May 2, 1959. The local committee, headed by Fred Logan, is working closely with the council in developing an attractive program. Mark the date!

**Pennsylvania Meets May 8-9** The Pennsylvania Art Education Association will hold its spring conference May 8-9, 1959, in Harrisburg. Meetings will be held in the Education Building, Capitol Park. Watch for program announcement.

**Immaculate Heart Exhibitions** A number of traveling exhibits are available from Immaculate Heart College, and you are invited to write Sister Magdalen Mary for particulars. The address is Immaculate Heart College, 5515 Franklin Avenue, Hollywood 28, California. We have it on good authority that those wonderful artist-nuns, Sister Magdalen Mary and Sister Mary Corita, pack most of the crates themselves for the dozens of circulating exhibitions making the rounds. By the way, you should see the latest issue of the *Irregular Bulletin* published by the art department at Immaculate Heart. There is nothing like it; you might get on mailing list if you made a contribution to the college building fund.

**Lowenfeld Book Is Honored** The third edition of *Creative and Mental Growth*, by Viktor Lowenfeld, was selected through a nationwide inquiry by Enoch Pratt Library, Baltimore, as one of the "most outstanding educational books of 1957," as reported in the September-October issue of the *National Education Association Journal*. This well-deserved honor is no surprise to us, for we have known it right along. It couldn't happen to a nicer person. Our congratulations!





C. K. EATON PHOTO

*Teresa's dancers do not have copy-arms. They have no elbows, no muscles. They just ooze up to say "arms" and are beautiful!*

## THOSE FREEING SENTENCES

**Natalie R. Cole**

*A famous classroom teacher, lecturer, and author of **The Arts in the Classroom** tells us how a classroom teacher can stimulate children to bring out what is within them by the things she says while they work.*

The role of the teacher in the Creative Arts is to set to work the Unfolding Process. We do this not by "teaching" in the old meaning of the word but *by taking off the layers*. The layers of what? The layers of Self-doubt and Lack of Faith.

Years ago I saw an exhibit of Children's Art, one part of which I'll never forget. It was the work of one child—I think her name was Alma. It began with her paintings from kindergarten or first grade. They stretched as wide as her



*The Madonna isn't pretty by some standards, but you could look at this picture a thousand times and not be tired looking.*

arms could reach and were flung out with abandon. There was unconscious distortion, dynamic rhythm and naive detail. Then followed other pictures—progressively less and less interesting and more and more sterile—as she passed through the grades. At last the director—with masterly showmanship—had placed a tight, tiny copy-type figure made of clay on top of a huge pedestal. Underneath he had placed the caption, "What has happened to little Alma?" We know what has happened to little Alma. The color-book and cunning cartoon have left their mark. Life's tensions and frustrations have done to her what they've done to us. Her art is dried up at its source. *But we can give her back her birthright! How? Through a series of little freeing sentences.*

Let's take painting. First we'll choose a communal subject, one we can all paint together. There can be more individual difference within that one subject than if there are thirty. And it's easier for the teacher. What she says to one can affect the others. A mass enthusiasm for the subject is engendered that will do much toward starting the unfolding process. We'll take time to explain to the children somewhat as follows: "When I was a child we had to worry and struggle and strain to paint things *exactly as they really looked*. But could we ever do that? No. Not in a thousand years. And it took all the fun out of paint-

ing. Now we know," (and this, adults, is our dynamite) "that 'making things the way they really look' *has nothing to do with painting a beautiful picture*. Any little old camera can do a better job of that than we. Our picture is beautiful only as we go *way down deep inside* and let it come out *our own way*. Then how many different kinds of pictures will there be here this morning?" "Thirty-three!" "As many as there are people!"

Now for some practical help. "Let's look at our paper. On a *big* piece of paper like this would we paint a *little* picture?" "No. A big picture." "Yes. We'll weave it to fill the whole space. From top to . . ." "Bottom." "And from side to . . ." "Side." "But first let's find that quiet inside that will tell us we're ready—that our wires are connected. Then we won't look at those painting next us. We'll be *all alone in the world*. Ready, begin!"

Now this means "Ready begin" for the teacher, too. She must look about quickly and find some child who has begun his picture and exclaim, "Children! Charles has begun his picture already. He didn't wait—he didn't worry. He just felt it inside and let it come out that way. Wonderful, Charles!" "And John! See how he's painting his picture big to fill his whole space." "And Susan and Cheryl!" "They're coming, children! Coming all over the room!" These beginnings may not be so wonderful but a child de-

serves some recognition for just plunging in and getting started. And if they're not so good they'll encourage others that they can do as well or better. The children need proof that we mean what we say. Their pictures don't have to be a neat, careful copy-type thing. Anything they do will be greeted with warmth and acceptance. The warmth of the teacher's voice is supporting them. It takes their mind off themselves. They're not left to inbreed with their inhibitions. It's like the old-time call to the altar. Few would have made it without the exhorting of their leader.

Language is a wonderful thing. It has taken thousands of years to build. Let's use it—at least until our children are over the hump and confident within. We begin our freeing sentences. We say them at intervals throughout the lesson. They're little "feeling" sentences that will be absorbed unconsciously by the children. "Will these fine paints and these fine brushes make the picture?" "No." "What is it that will make it beautiful?" "Ourselves." "From down deep inside." "Yes. We'll let our picture *flow* out. Flow like a mighty . . ." "River." "We'll let it *roll* out. Roll like the giant . . ." "Ocean." "We'll let it come *shooting*. Shooting like . . ." "A rocket." "A

star." "Oh, how beautiful! We'll let it come out as easily as *breathing*. Nobody squeezing it up till it's dead and ought to be buried. We'll just *breathe* it onto our paper. Here we are painting right next to each other but oh how different."

With this sentence we can work wonders. We can say it with punch and power. We can breathe it with awe and wonder. "Different from everyone else's in the whole . . ." "World." And sometimes now they'll say, "The Universe." "Different as we ourselves are different." "Everybody *experimenting*. Finding our own patterns of people and things. Letting your own *rhythm* come out—your own *personality*. Pretty soon we'll be able to look at your picture and say, 'That's Gary's picture.' 'That's Cheryl's picture.' Children, you've surprised me. I thought just a little of your own honest painting would come this morning, and look, it's coming rolling, flowing, shooting all over the place. And next time it will come even more quickly and even more wonderfully as it's had time to grow inside us while we eat, while we sleep."

It will grow in the teacher too. But now let's look at the photograph of the little girls painting "The Show." See

*The dancers in the block print may look like horses, as one child remarked. "So what?" said the others, "it is beautiful!"*

C. K. EATON PHOTO





how Teresa on the right *divides* her picture. She got it *all ready* before she put in her people. How did her people get to their seats? Did they have to climb over everybody's stomach? No, *aisles!* She's found her own *individual audience pattern* so she can get her hundreds in. See how easily she's swung in the stately boxes that tell the "Palace" was once our city's opera house. See how her dancers *weave to fill the whole space*. Their arms are not copy-arms—no elbows—no muscles. They just *ooze up to say arms* and they are beautiful. Opposite her in the white dress is Maria painting "Las Rosas Cafe." You see lots of interesting things when you live right off Main Street. See how she cuts off her stage with a dramatic sweep to make room for more gay people. Gay? Look down at the bottom and you'll see someone dancing on top a table. "This is a drunk woman." There's spontaneity abroad as her companions thrust high their cocktail glasses.

Now let's look at the child's Christmas Madonna. Oh, I know it isn't pretty. But, as I tell the children, a pretty picture you can look at once and be tired looking. This picture is peculiar—it's uncomfortable. But through the years I've learned to respect the peculiar and the uncomfortable. This picture you can look at a thousand times and not be tired looking. Let us look at the little girl's block print of "Our Room Dancing." "Her people look like horses," says one of the children. "So what?" say the

others. Not until we get that "So what" feeling in the room will things of distinction come popping. And last we have the boy's blockprint also of "Our Room Dancing." True, his children don't look like children but he's found his own innate pattern and has stuck to it with integrity. His feet hug the floor but they are turned in opposite directions to give life and to *say* feet. The dark of the hair and outline is dramatized by the comblike lines lightening the background. Notice the fine dress design of the middle figure. His design *holds together* and *says one thing*. It bears the stamp of the individual. It would add distinction to any wall. I can boast about it because I didn't *teach* it. I was just the midwife ushering it in.

The fine art is in the children. The teacher's job is to get it out. Here, understanding is more important than art background. The teacher is the catalyst—causing things to happen. It's a wonderful role for the teacher. As we work to satisfy the children emotionally we find ourselves more satisfied. As we work to free them we find ourselves more free.

Natalie Robinson Cole is widely known as author of "The Arts in the Classroom," John Day Company, which has been a best-seller since 1940. A resident of Los Angeles, she has been a dynamic classroom teacher, inspiring all of us. She is a popular speaker at various educational meetings.

*His children don't look like children, but he has found his own innate pattern, and it would add distinction to any wall!*



C. R. LEE PHOTO



PHOTO BY RALPH MARLOWE LINE

*A foam glass sculpture by K. J. Ast, student in the first of three basic design courses offered students of architecture.*

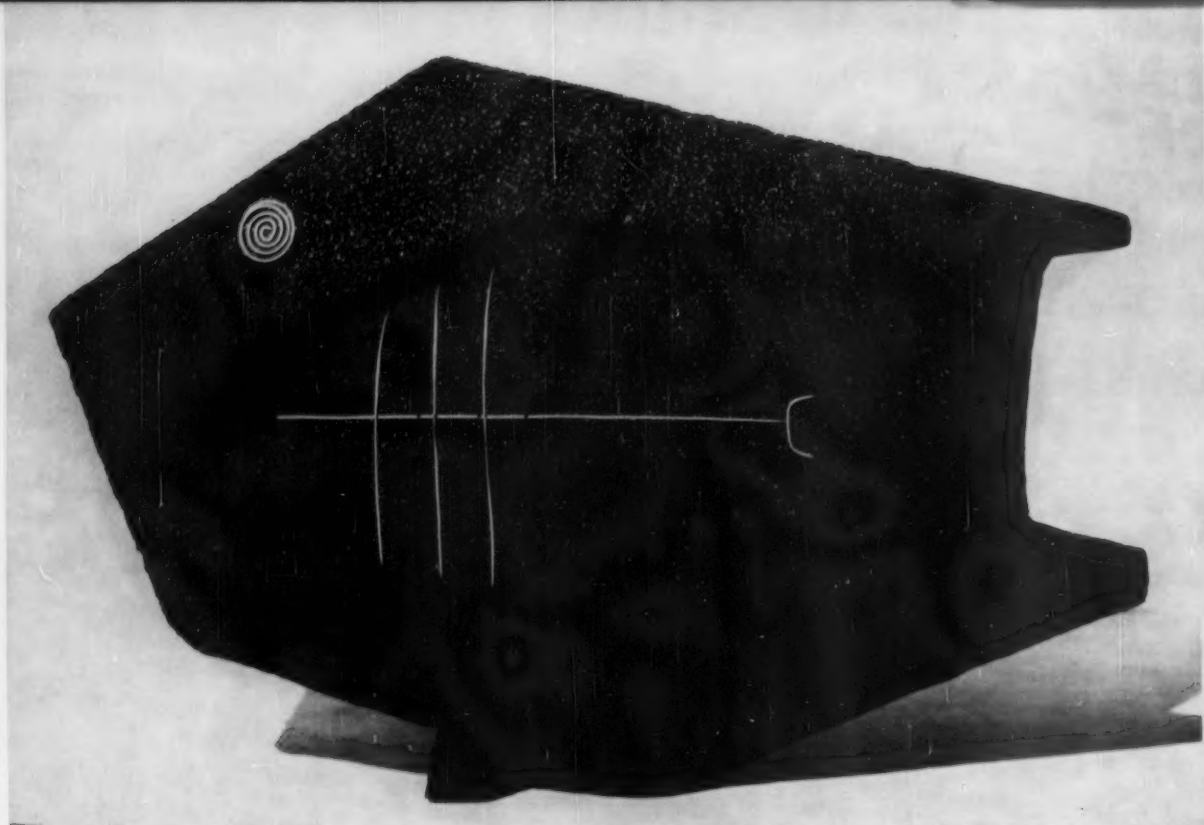
## Using foam glass for sculpture

**Olaf S. Fjelde**

*Foam glass is an excellent carving material with a great many uses in the art program at various levels. The author shows us work of freshman students at the University of Illinois, tells how they use it.*

Foam glass has special qualities which commend its use to students as an admirable material for sculpture. To the casual observer the sculpture appears to be produced by slow, time-consuming hours of painstaking labor. Nothing could be further from the truth. It works very easily and quickly. A penknife, a nailfile, a saw for longer cuts, are all the tools that are necessary. A paper clip will easily

cut the material. Curves can be smoothed out with coarse sandpaper. It has an attractive sparkling black texture that does not need further treatment. If there were some way to overcome its brittleness by coating it with a transparent material that will not obscure its natural beauty, thin sections would be less susceptible to shock. Oil paint has been used but it takes infinite time and patience to work the paint into



RALPH MARLOWE LINE PHOTO

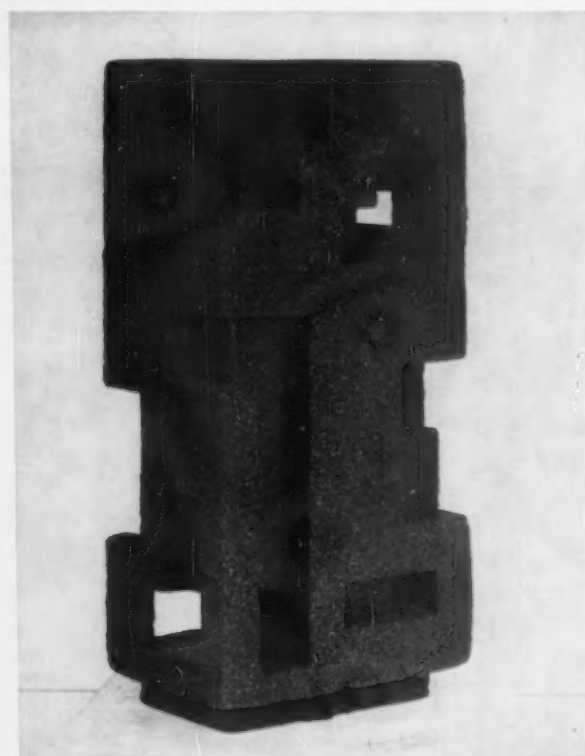
*A foam glass fish by Kenny Cisna, student in freshman art, University of Illinois. John Rauschenburger was instructor.*

*Foam glass coated with plaster of Paris, by R. M. Koenen, architectural student. The surface was sanded after drying.*

*Sculpture by a student in Architecture 101, first of three basic design courses for architectural students at Illinois.*



RALPH MARLOWE LINE PHOTO



WALTER JOHNSON PHOTO



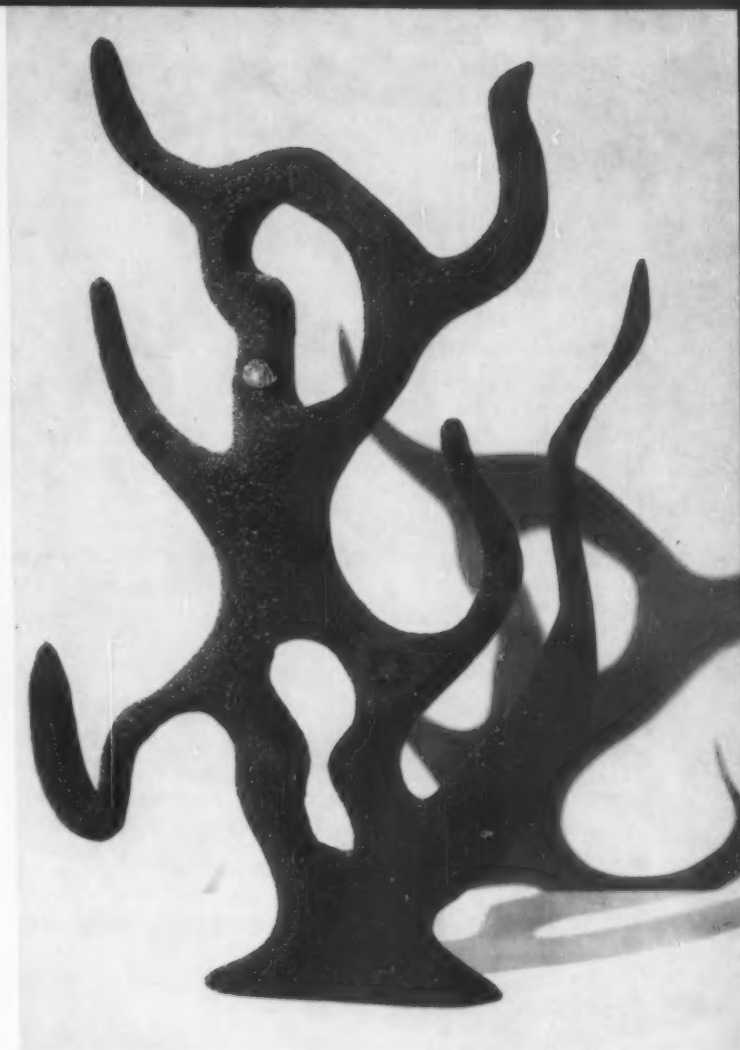
the tiny glass cells and in a small piece of sculpture seen near at hand, the paint brings out otherwise unnoticeable defects in modeling. An interesting variation which also increases its surface tension is obtained by coating the material with a very thin coat of plaster of Paris. This makes a mold unnecessary and makes a piece of sculpture that is very light in weight. An antique effect can be obtained by adding dry color to the plaster and not mixing it too thoroughly.

Foam glass is dry. Since it is a solid material it keeps its shape. It is available in blocks of various sizes at your local builders' supply dealer. Twelve- by sixteen-inch blocks come in two-inch, two-and-one-half-inch, three-inch and four-inch thicknesses. Eighteen-inch by twenty-four-inch blocks, three and four inches thick are also made. When necessary foam glass can be laminated or glued together with rubber cement. Special mastics for this purpose are also made, but they come in quantities too large for

*A head in foam glass by a freshman art student at Illinois.*



RALPH MARLOWE LINE PHOTO



RALPH MARLOWE LINE PHOTO

*A nonobjective design by Richard Radel, Architecture 101. His sculpture shows many possibilities in this new medium.*

student use. Since foam glass is abrasive, it might mar desk tops; and since you want to teach your students to be good housekeepers, it is best to work over newspapers, so that the refuse can be collected and readily disposed of.

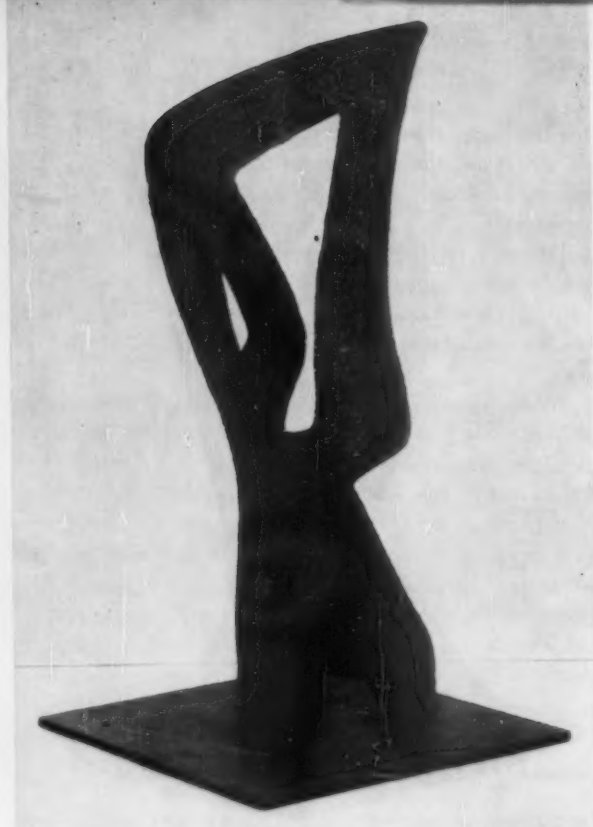
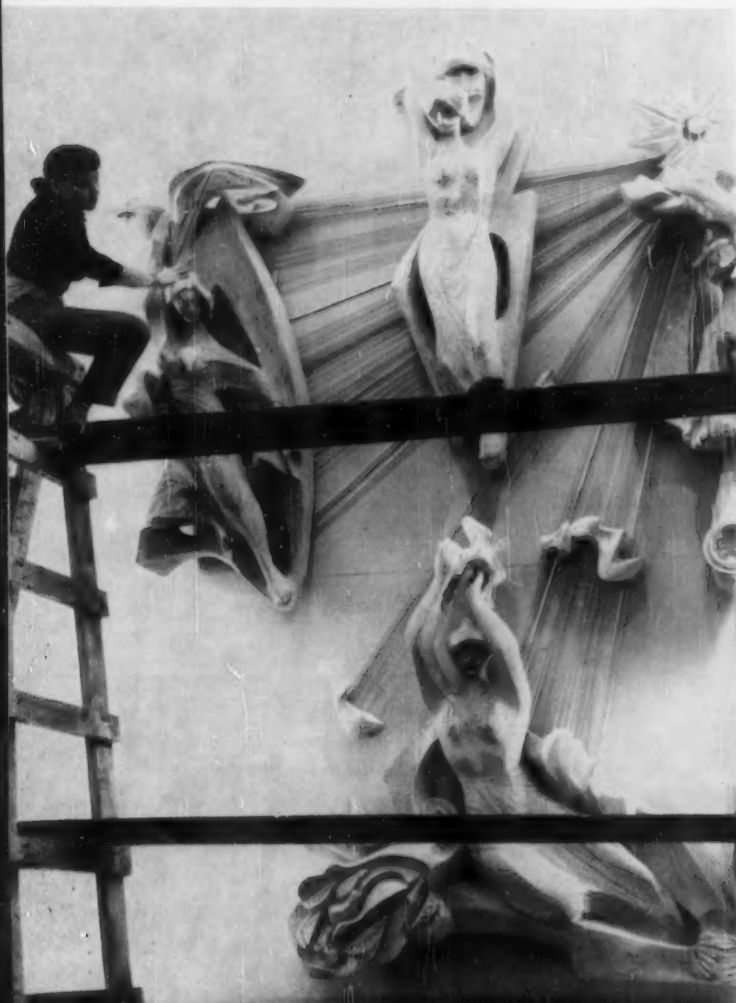
What is foam glass and how is it made? It is composed of ground glass to which chemicals have been added. Among them, carbon gives the black color and a sulfur compound produces the characteristic sulfur smell, which in small quantities is not too objectionable. This mixture is put into pans and baked at a high temperature to rise like bread dough to fifteen times its normal volume. It is then cooled very quickly, forming a very lightweight material which weighs only nine pounds per cubic foot. It is incombustible, will not absorb water and has a very low coefficient of expansion. Though thin sections are brittle, it has great compressive strength. It is a very good insulator. Chemically inert, it doesn't decay and bugs do not eat it. Because of all these marvelous characteristics, the building industry, for which foam glass was first produced, uses it as a very

valuable insulating material. Artists and art students, too, have found that it is a unique material for sculpture.

When the S.S. United States (Architectural Forum, Volume 97, July 1952, pp. 117-125) was built, every possible effort was made to make it as light and incombustible as possible. Lightweight aluminum replaced steel, saving 2000 tons in weight. Textiles were made of Fiberglas. Fire-retardant paints were developed. The only wood used in the whole ship was in the butcher's blocks and the grand pianos. In other ships, heavy sculpture was used high in the ship, which had to be removed because it raised the center of gravity too much. Not so in the S.S. United States—the sculptural mural in the first class dining salon, created by Gwen Lux, is made of lightweight, incombustible foam glass.

For architectural models, it admirably simulates rock outcroppings when it is given a light coat of tempera. In fact, its use is limited only by our ingenuity and imagination. The nature of foam glass does not lend itself to meticulous time-consuming detail that would exceed the interest span of students. Rather, it encourages big, simplified forms that are dictated by the nature of the material. "Form follows function and the will of the material." Interesting objective and nonobjective forms can be made very quickly which will give the student the stimulating joy of creation.

*Sculptor Gwen Lux painting foam glass figures on new ship.*



WALTER JOHNSON PHOTO

*A foam glass creation by a freshman architecture student.*

Olaf S. Fjelde is professor of architecture, University of Illinois. The collaborating photographers, Ralph Line and Walter Johnson, Jr., are associate professors in the department. Ralph Line has photographed seventy-seven of the works of Louis Sullivan to illustrate books on his art.

*Sculpture by Robert Hotvedt, student in Architecture 101.*

RALPH MARLOWE LINE PHOTO

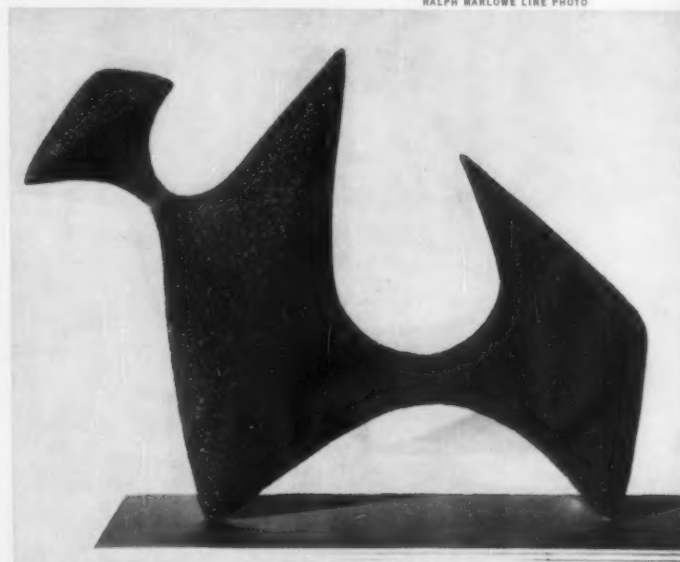




PHOTO BY DENNY C. HARRIS

*How different from the old-time drugstore is this modern pharmacy! It was designed by the author, Leon Gordon Miller.*

**Leon Gordon Miller**

*A prominent industrial designer draws from his own experience as student and teacher as he evaluates the place of creativity, sensitivity, and technical discipline in an art area which touches every life.*

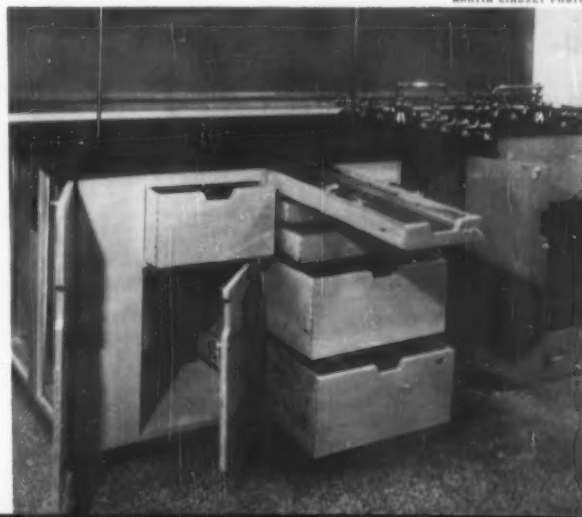
## Training for industrial design

Design today is considerably more than a drawing process. If I personally were to define Industrial Design I would say that it is a problem-solving process resting upon a tripod of creativity, aesthetic sensitivity and technical discipline. Under the heading of creativity comes the ability to think and to perform the "imaginative leap" necessary to solve an old problem in a new way, a new problem in a new way, or to anticipate the problems that may arise in the future. While the development of aesthetic sensitivity draws strongly on the arts, appreciation and response to appearance is a personal endowment which can be expanded and refined in ratio to the training and experience to which one is exposed.

A designer must be well trained in all of the techniques and skills attached to his work. I would like to make special

*Student medical laboratory table designed by the author.*

MARTIN LINDSEY PHOTO







SUPERIOR STUDIOS PHOTO

*Executive office and conference room designed by the author. His early experience as an art educator has been invaluable.*

emphasis on the concept that design is not a drawing process. To the practicing designer, drawing is a tool of communication and not an end in itself. A manufacturer, industrialist or institutional client does not hire a designer because of his ability to make a rendering or to make a working drawing. A designer is hired because of his problem-solving ability, his ability to research a problem, to assimilate data pertaining to production and marketing and to synthesize all of these elements into a result that is economical and feasible to produce. This point of view does not mean that drawing and the other tools of communication such as model making or sculpture are of no consequence. Quite the contrary. It assumes mastery over the tools, just as one assumes the surgeon to be master of the scalpel with which he makes the incision.

Each tool of communication, whether it be speech, the written word, drawing, a diagram, model or sculpture, is

used to clarify a problem or a process either to the designer himself, the client or the fabricator who ultimately will make the finished product. In my own offices we have a policy of using that particular communication tool which best presents the solution to the problem. We do not write a solution if we can tell our client the answer. We do not draw a solution if we can write the answer. We do not make a model of the solution if a sketch or drawing will do. We select the particular mode of communication required to best clarify our intent and transmit our thinking. Said simply, the designer's task is to first comprehend the problem, next solve it, and then to transmit his thinking to another individual. To this end most courses of study set up exclusively to educate designers run five years on the college level.

The curriculum must include all of the technical elements of communication. The aspiring designer must have the ability to draw easily. He must have experience with ma-

materials and structure, shape and form. He must have drafting experience and experience in graphics and in sculpture and model making. He must have an understanding of light and color and a concept of the second and third dimensions. He must have some training in engineering and learn something of production methods. These are basically the tools that make it possible for the designer to carry on a part of his work. They are not the end in themselves. Preparation for the field of industrial design requires this technical knowledge, but also requires a considerably more rounded experience.

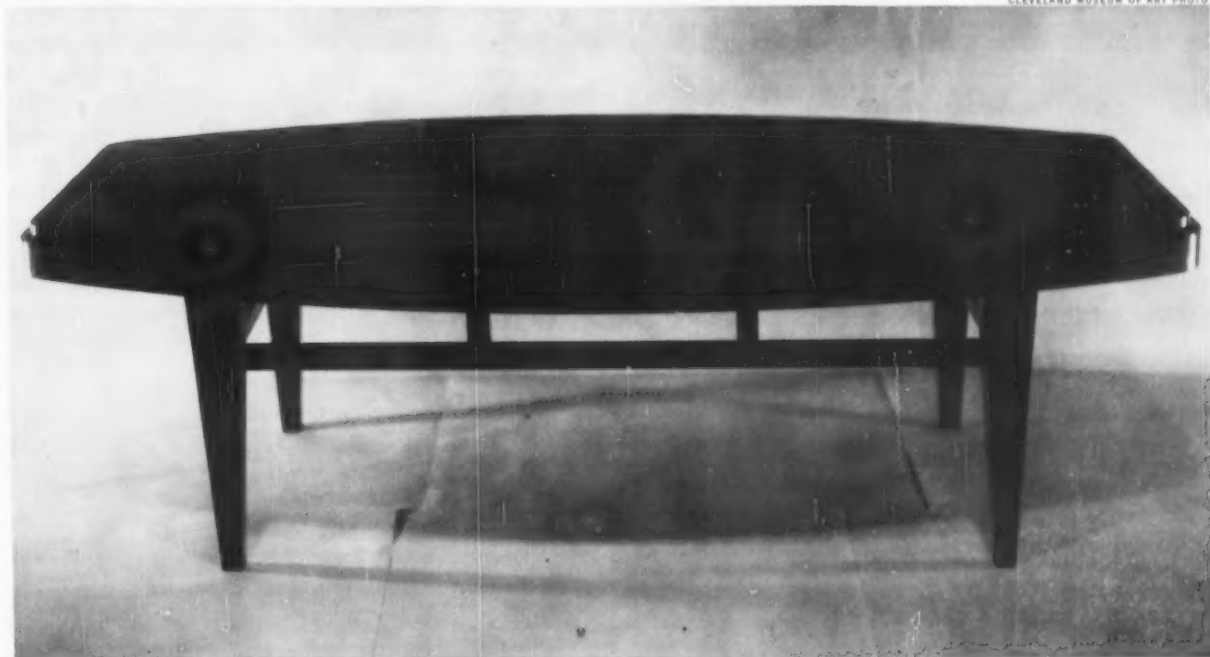
The designer must understand how to evaluate a problem. He must have the ability to analyze function. He must have some contact with market research and merchandising and learn something of business procedures. Above all he must have unlimited resources upon which to draw. He must always be able to come up with one more idea, one more solution. Familiarity with the sciences as well as the arts will help broaden these resources, enabling him to draw from the entire cultural heritage of our society for his inspiration.

I am aware that this is a rather large order to place before any prospective student or group of educators, but this is what is required. A designer also must recognize that education in the field of design is a continuing process. The years spent in formal training are merely the starting point in a profession that can be practiced only by continuous expansion of knowledge. I myself was not fortunate enough to receive my design training from an organized curriculum such as I suggest here. The profession is a very young one and many of the originators of it are still active



*Author heads a Cleveland industrial design organization.*

*This walnut coffee table inlaid with brass strips won first award in furniture for the author at Cleveland Museum of Art.*





*One of a line of lighting fixtures designed by the author.*

practitioners in the field, or are heading design schools or design departments of comparatively recent origin.

But in my own education there are many high points which have proven extremely valuable. I remember shop courses where we had the opportunity of designing an object and actually building or making it, or turning it out on a lathe or working at some other production process where we came face to face with the realities of the structural or production problem. There were also some unusual part-time jobs, such as operating a kiln and working with ceramics, working with textiles in a mill and other work experiences involving production. One instructor opened my eyes to the

endless visual experience in natural forms. I have found since that researching other designers' work in a particular field is of value, but does not inspire new creations. Too often the results are derivative rather than original. But the endless visual experience is a source of stimulation and inspiration for resolving many technical problems that arise in the everyday business and production world.

I have found that experiments with materials to learn what they can do has been a tremendous help. I am not exactly sure where I first developed an understanding of woods and metals, glass, plastics and synthetics of one type or another, but I do know that a book of knowledge in this area grows every day as new materials are available and as they come to my attention in the process of problem solving. The general experience of being an art educator myself during the early part of my career has been invaluable in orienting both our craftsmen and our clients to an understanding of procedures and processes involved in the contemporary visual and form experiences. I think the early contact with painting and drawing classes where drawing became second nature and painting was an experience of visual and tactile stimuli, working with abstract forms, color and other relationships of textures have had their subconscious application every day of my professional career.

My interest in the plastic and graphic arts continues consciously too, of course. I still sketch, paint and cut wood blocks and feel strongly the need for continuing these creative expressions. As a designer I feel strongly also that this same type of creative expression is a part of the total design experience. In interiors and other relationships to architecture, the works of artists and craftsmen become integral parts of solutions. It is my feeling that both the designer and society benefit from exposure to such creative experiences.

The field of industrial design is a wonderful field where the designer can dream and see the results of his dreams within a reasonably short period. The field is young and industrial designers are very badly needed; especially designers who are properly trained and who have the orientation required for growth. Artists and craftsmen have throughout history helped shape their environment. This role is no less true of the designer who today is helping to form a way of life consistent with our technological age. Anything employed by modern man in shaping his environment constitutes a component of our culture in which the field of industrial design is involved.

Leon Gordon Miller has headed his own industrial design organization in Cleveland, Ohio since 1946. He is a space planner and designer of interiors, products, and special equipment for business, industry, and institutions. He has taught, lectured, and written about design, and has earned numerous awards for his work. Mr. Miller is a trustee and national treasurer of the Industrial Designers' Institute and chairman of the organization's Ohio Valley chapter. He is on board of trustees, Inter-Society Color Council.



William A. Bakamis

*An industrial arts professor discusses movements and controversy in industrial arts, and points out how a creative orientation in this area can produce more significant contributions to lives of students.*

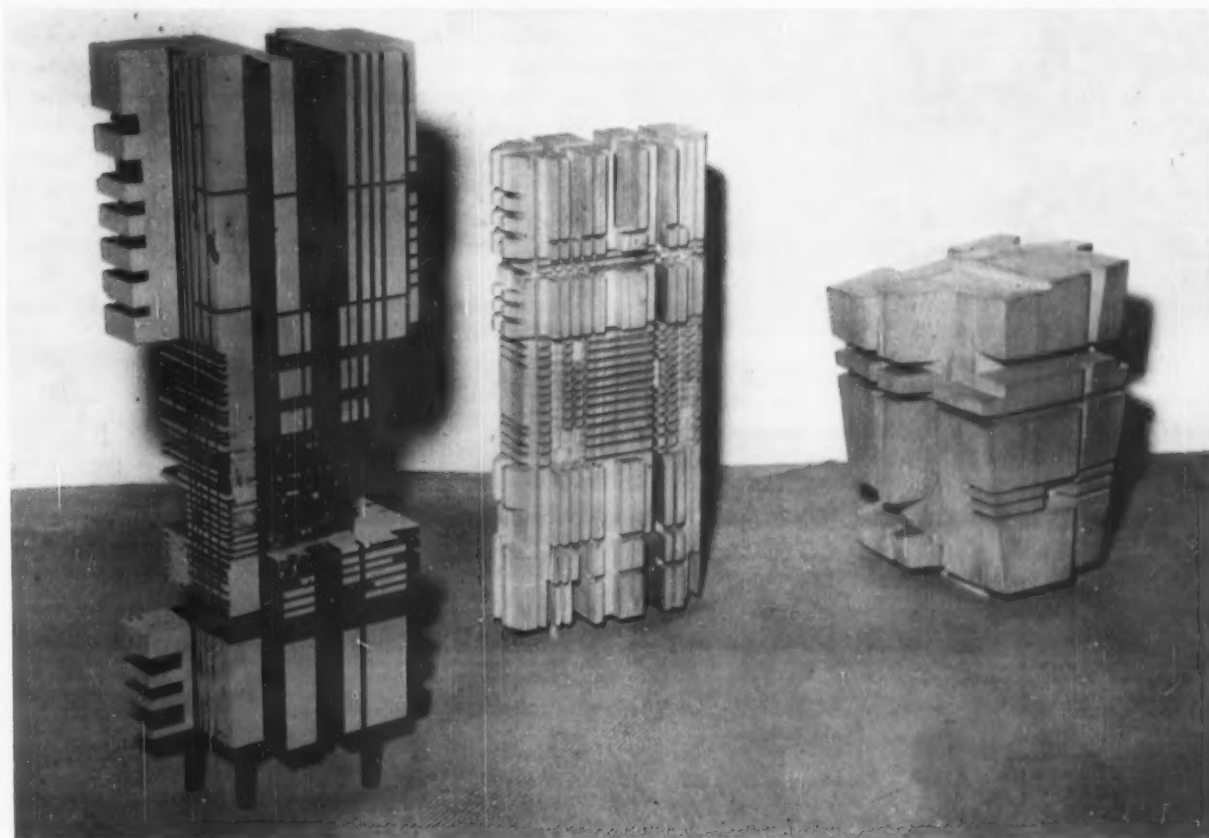
## A NEW LOOK AT INDUSTRIAL ARTS

Through the industrial arts, students may find the answer to such perplexing questions as how to forge a chisel, how to "wind" an electric motor, how to Fiberglas a boat, how to fabricate furniture and how to drill holes in glass. Such questions are quite normal to the student. Involvement in them weaves the real fabric of thought that is based upon material and intellectual relationships. How the student applies his thoughts, rather than the thought itself, is the important thing. Problems do not terminate with verbal answers that may satisfy the student's curiosity. They go beyond this. Students engaged in such problems have a need for such things. There is a need for the bookcase,

for the electromagnet, for the boat and for the hi-fi set. The *how* and the *why* are merely starting points of *do*. Only through actual performance can the student get an answer to his question. This is the acid test of adequacy of purpose. School shop situations that involve students in circumstances which they may accept with clear understanding and proceed to do something about are the type which develop their adaptability in meeting the problems of our technological society.

Some still contend that the industrial arts are for the poor or average student and that the problems are not thought-provoking. It is true that not all industrial arts problems

*These creative wood pieces were done entirely on the circular saw. Their architectural forms could be related to design.*





*Girls, too, can satisfy creative urges in industrial arts.*

are thought-provoking nor are they difficult to perform. This, however, does not mean that they should not be considered. Educationally speaking, there is a hierarchy of difficulty in industrial arts, as in other subject matter areas, which ranges from the simple to the infinitely complex. It is possible, therefore, to adapt industrial arts work to all levels—from the kindergarten to old age—and thus to improve the minds of all normal individuals who take the work seriously.

The development of the student's powers to plan and execute is vital in any good industrial arts program. If presented as an intellectual adventure, few children can resist the challenge. Teachers who look for the material things cannot lay down such a challenge. The teacher who can go beyond material things and into the increasing joys and power of mind that come out of actual art participation, contributes most to the over-all development of the student. Students taking industrial arts work must engage in worthwhile situations. They must anticipate the problems that may arise, gather facts concerning the solution of these problems, study the facts, arrive at conclusions and *do* something to "discover" the good or bad consequences and adjust themselves accordingly.

What do we mean by "industrial arts"? Strickler, in defining the term, said the chief significance was in the second

word, *art*. *Industrial*, he said, is a minor adjective indicating the area of application. True art requires imaginative application of intellect to conceive pleasing and functional forms for which the designer has the interest and the ability to create. Industrial arts is concerned with the "*process of creating*" rather than the study about industry, its products and processes. Method in industrial arts is far more important than content. The method of finding problems and solving them is the "new" concept in industrial arts education.

The intellectual and artistic character of a subject is determined mainly by what is done with it. If it arouses interest, if it leads a student on to greater mental interests and accomplishments, if it doesn't restrict the range of interests—these are the bases for its importance. The value of industrial arts lies in the attraction it possesses for certain students. The derivative personal values that students find in it demonstrate its worth. It must be vital to the student to figure in his educational growth. How vital the subject is depends on the student's personal capacity and sensitivity to particular problems and the teacher's ability to meet him on a common ground.

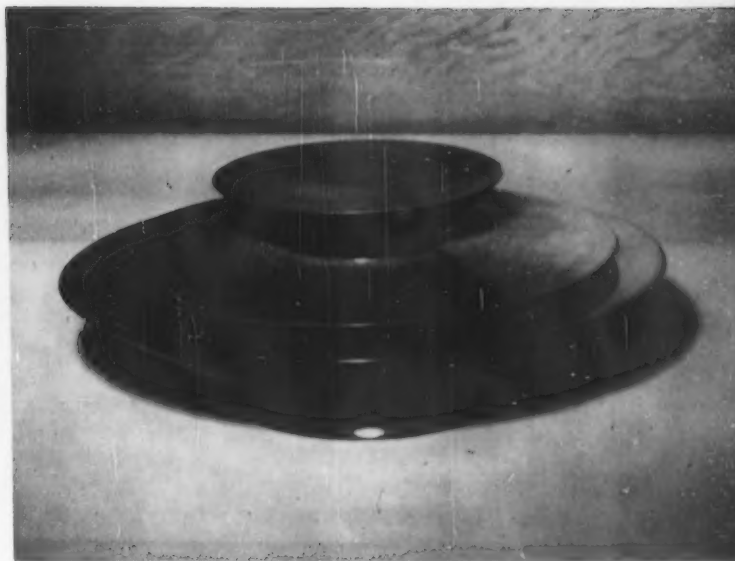
There are those among us that firmly believe that knowledge breeds interest. These same critics feel that to create interest where it is lacking all that needs to be done is to lay on more knowledge. Nothing could be further from the truth! Students that learn all that they can understand about metalwork, metal fabrication techniques and tools, and still are not interested aren't going to be inspired if more related information is "piled on." This type of "learning" leads to a snowballing type of disillusionment. Interest will not come about until some idea or item of knowledge arouses within the student a disposition to play or meet it head-on. The essential element in education is desire. Where worthwhile desires are encouraged and assisted, life has become enriched. Where these desires have been ignored and re-

*Student projects can be designed as well as made by them.*





*Students should be encouraged to experiment with new forms.*



*The sculptured look can be included in a machine product.*

strained you are likely to find the dead souls of despair. Industrial arts cannot afford to ignore youth's desires. It must nurture and sustain them for they are steppingstones to genuine personal interests.

Students in industrial arts must not be relieved of the tasks of thinking for themselves. There are those, however, who do not realize that outwardly directed work in industrial arts classes shunts the emphasis and attention of children away from one of personal identification with an art problem to one of compliance with the specifics which will satisfy the whims and desires of those who dominate them. In such a situation the thoughts of those who dominate become a substitute for independent expression on the part of the student. If the student is told *what* he is to do, *how* he is to do it, and *when* he is to do it without taking him into consultation, then his only recourse is to follow mechanically through the steps which are plotted for him, in ways plotted for him to a result which is plotted for him. In such a process the student learns to gauge his action so that it satisfies his teacher. He does not enter upon his own appraisal of the problem or cope with the inherent difficulties that will arise. Interest gives way to busywork, initiative to submission, free thought to imitation and self-reliance to dependency. His whole personality is sacrificed because of *mass conformity*. Is this the way to build the citizen of the future?

Given freedom, the student of average ability will not make a worse appearing project than that which results when he is "forced" to follow the usual specifications of his teacher. It is surprising what boys—and girls—can do on their own initiative. Left alone, they can exercise ingenuity in producing things with an element of individual distinction. It is surprising to see what some of the abler students can do once they are given free rein. This type of person has



*Contemporary furniture designed and fabricated by student.*

helped build the America we know and will continue to do so in the years to come. The industrial arts provide the nourishment needed by such persons for the work they do. If the schools provide facilities for this type of work, if there is freedom for it, if there are examples of good craftsmanship available that show what can be done along with understanding instructions, the student must be accountable to himself for his failures or for his progress. Under such conditions the student, with the guidance and encouragement of his teacher, can eventually develop some personal stamina and moral fiber of his own. This makes the industrial arts a



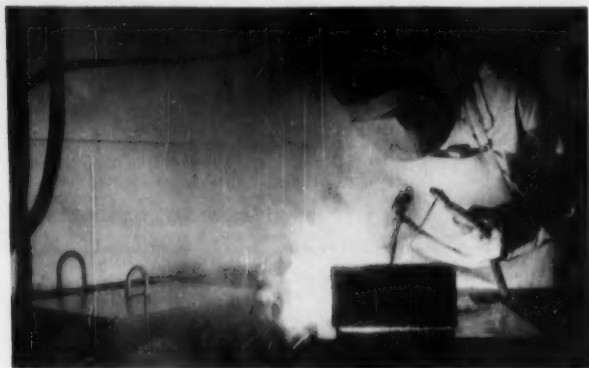


*Modern finishing methods are important to sound program.*

method of living in today's world. By "moving" from one thing to another the student will eventually discover some happy facility that would lead him into satisfactions of greater mastery.

Outcomes such as these can scarcely be expected from the so-called "try-out" courses, which have little relationship to industrial occupations. The same applies to the outcome from the so-called "industrial exploration" courses

*A knowledge of fabrication methods expands possibilities.*



which have been derived from various dismembered trades that are now practically extinct because of automation. These courses take their point of reference from factual and material things outside the student. They glorify established sequences and unattainable standards. They maintain the dominance that parents and teachers have built up, wherein children continue to find others to do their thinking for them. They can do little more than nurture continued dependence. On the other hand, the industrial arts taught as *arts*, would begin and end with the student. The student would be given

personal responsibility for the thought, conclusion and subsequent action from beginning to the end of any significant task. This would lead to future adjustment through a series of ongoing present adjustments. It would encourage an attitude of compromise—that is—making sacrifices for the benefit of greater gains. Furthermore it would develop the traits of initiative, perseverance, self-reliance, patience and others which define individuality. This "self-orientation" approach would separate the seeds of capacity from the chaff of immaturity and plant them within some art with the hope of reaping a more stable, capable and responsible maturity.

The problem of industrial arts education is one that concerns itself with the whole welfare of the individual as he develops physically, emotionally and intellectually by means of his participation in industrial arts activities. His physical capacities must be nurtured, safeguarded, developed and guided into competence. His emotional sensitivities must be sharpened and stabilized. His intellectual powers must be developed. His problem is that of discovering and promoting his own effectiveness. For his teacher the problem is one of intelligent guidance during the transition period between dependence and independence. The success of any industrial arts program is dependent on the teacher. By virtue of his breadth and richness of his background he should be an inspiration to his students. Skill in the subject matter alone does not guarantee success. Neither

*Acquaintance with materials is essential in the designing.*



does skill in teaching. The truly successful teacher combines both to the fullest as he continues the on-going process of developing effective enterprising citizens of tomorrow. He only can provide the training that will enable the youth of this country in their lifetime to fashion a truly democratic state.

Dr. William A. Bakamis is associate professor, industrial arts, Washington State College, Pullman, Washington. He is active and influential in industrial arts circles, and his views should prove interesting to thinking educators.

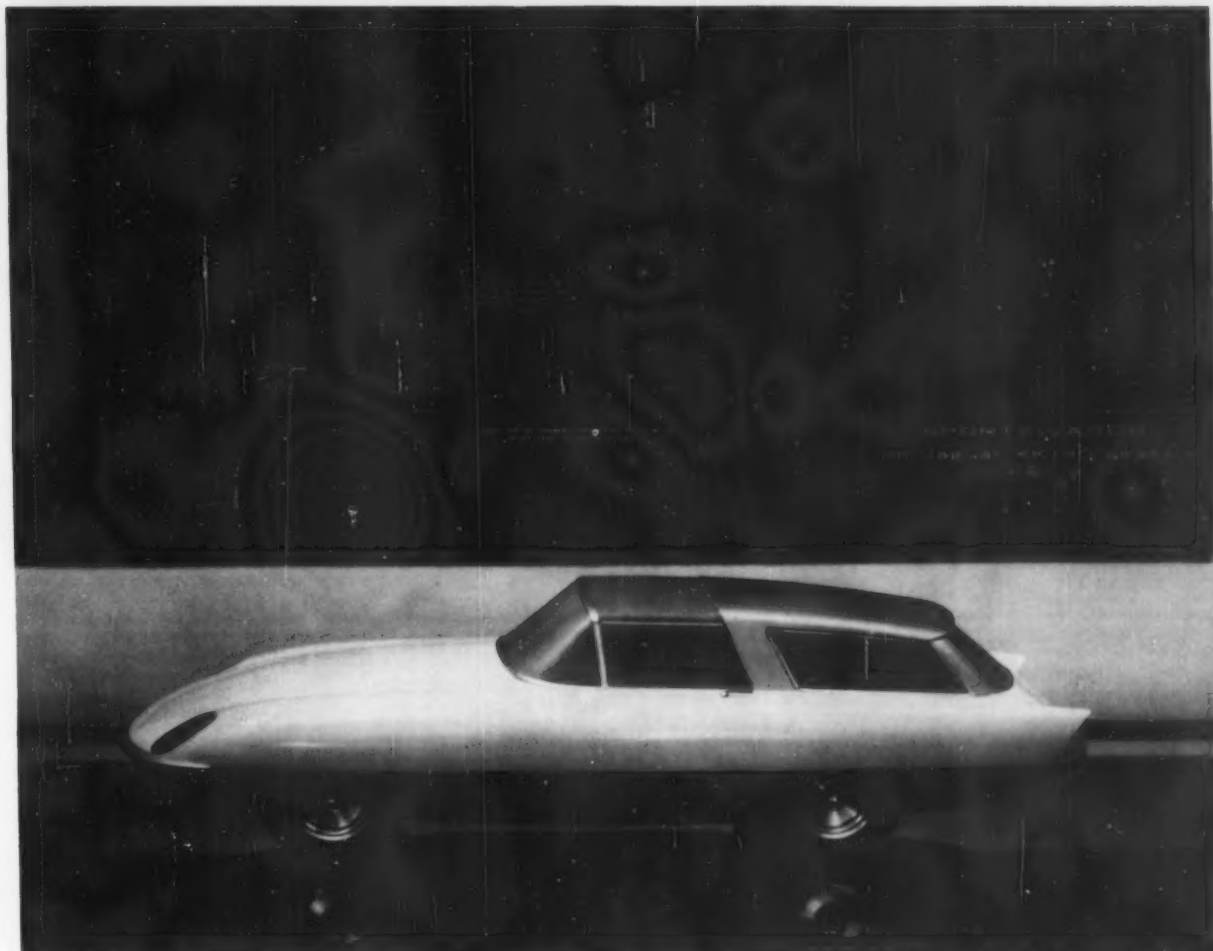


PHOTO COPYRIGHT, COUNCIL OF INDUSTRIAL DESIGN, LONDON

*A model sportswagon on Jaguar chassis, designed by second-year student, Vilhelm Koven. Compare with modern rococo.*

## ART AS INDUSTRY'S ALLY

**F. C. Livingstone**

*Industrial design is one of many areas where art and science are wedded in modern technology. The author describes how British art schools plan to meet industry's great need for qualified designers.*

The British education authorities have at last awakened to the need for giving industrial designers of the future a thorough training in the requirements of industry, instead of providing a purely theoretical training and leaving it to the companies who eventually employ them to give the practical experience. Until this fall, there were only two colleges in the whole of Britain which offered training in

industrial design. One was the Birmingham College of Art and Crafts and the other the London Central School of Arts and Crafts, and in 1955 the total number of students who successfully completed the diploma courses in both schools together was only seven. In 1956 it was eleven.

Because of this lack of trained designers, many large British firms were forced to establish their own training

schemes. Although this training within industry had a certain success, it was recognized that it could never take the place of the broader education which could be given only at a college or university. When, at last, the British Government was made aware of this gap in training, the problem was passed to the Advisory Council for Higher Technological Education. The result has now been that the Royal College of Art—a 120-year-old national establishment which has independent university status—has just inaugurated a four-year intensive course which, it is claimed, will provide a broader training in industrial art and design than is now available in any other part of the world.

The response to the announcement that the course was to start was immediate. Over 500 applications were received for the 120 places which were to be filled for the first year's course at the beginning of this October. It is said that the standard of the majority of applicants was so high that there was considerable difficulty in weeding them out. The decision to establish this four-year course was taken a year ago by the Advisory Council for Higher Technological Education, after it had heard the views of manufacturers in fields as far apart as automobiles and domestic utensils, agricultural equipment and electrical fittings. These firms, according to the Council, stressed "the need for the services of men and women of creative imagination with enquiring and analytical minds, who have been trained to consider the appearance of objects as well as their function and who have good taste, and a feeling for color, shape and texture in

metal, wood and plastic materials. Though they will be comparatively few in number, the influence for good which such people may have on the sales of manufactured products can hardly be exaggerated, and excellent opportunities exist for them not only in the larger engineering concerns but also with many of the smaller firms which manufacture the wide variety of products covered by light engineering."

With the advice of many hundreds of manufacturing companies who would employ the students on the successful completion of their course, the syllabus was planned on the broadest possible lines. It was recognized that most students going to an art school, by the very nature of their training there, specialize in developing their artistic ability within a narrow field and do not continue studies in scientific and mathematical subjects. On the other hand, technical college students concentrate equally exclusively on technological and scientific studies and what artistic ability they possess is not developed. Furthermore, the progression of an engineer to professional status is closely circumscribed with rigid syllabuses and examinations and there is no time to include in these courses appreciation of, and training in, aesthetic design.

The Royal College of Art was selected to run this course rather than a university or technical college, because it has many advantages over other institutions. There, standards of good design are taught far less by precept than by example, and the students of the Industrial Design (Engineering) Department of the Royal College of Art would

*An electric wall cooker designed by third-year student, D. R. Evans, who transferred to the new course after two years of engineering design studies. Cooker includes oven, grill, infra-red grill with spit, warm chamber, hot plates, and so on.*

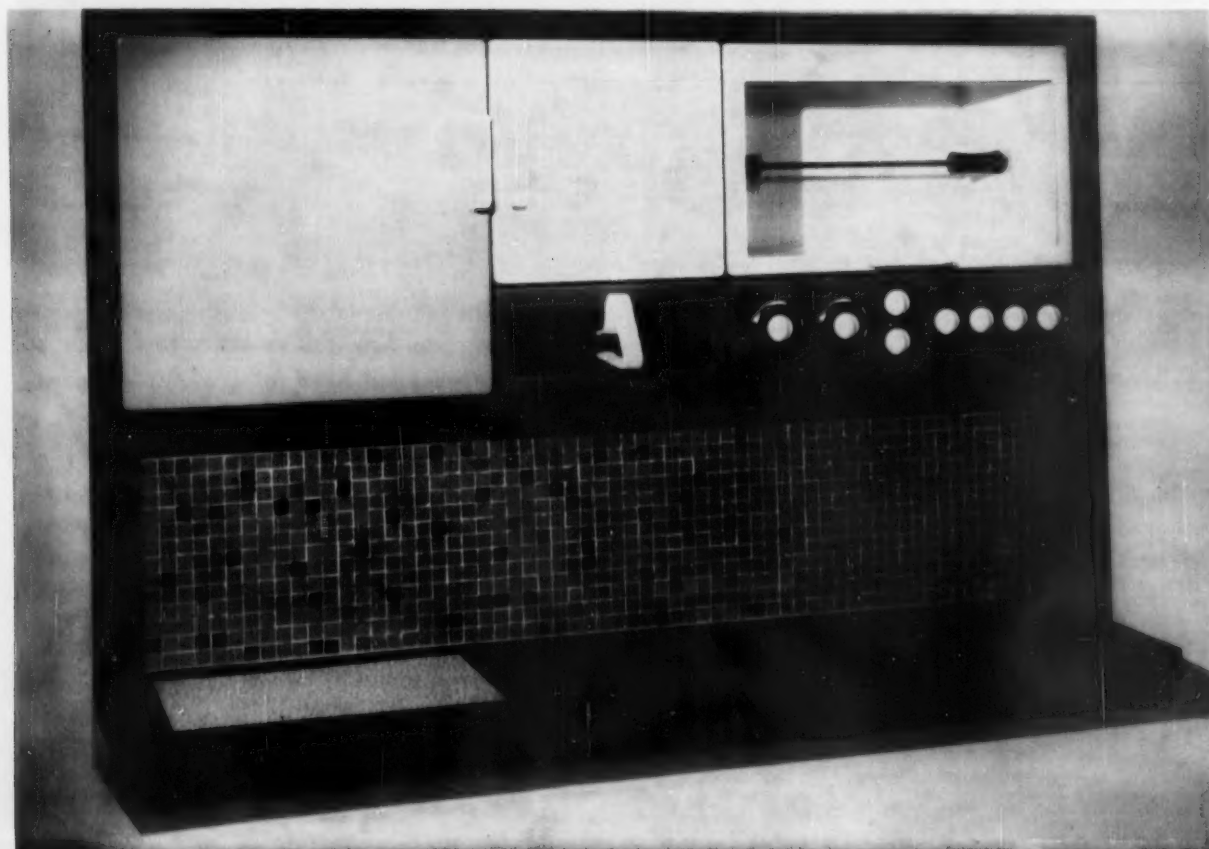
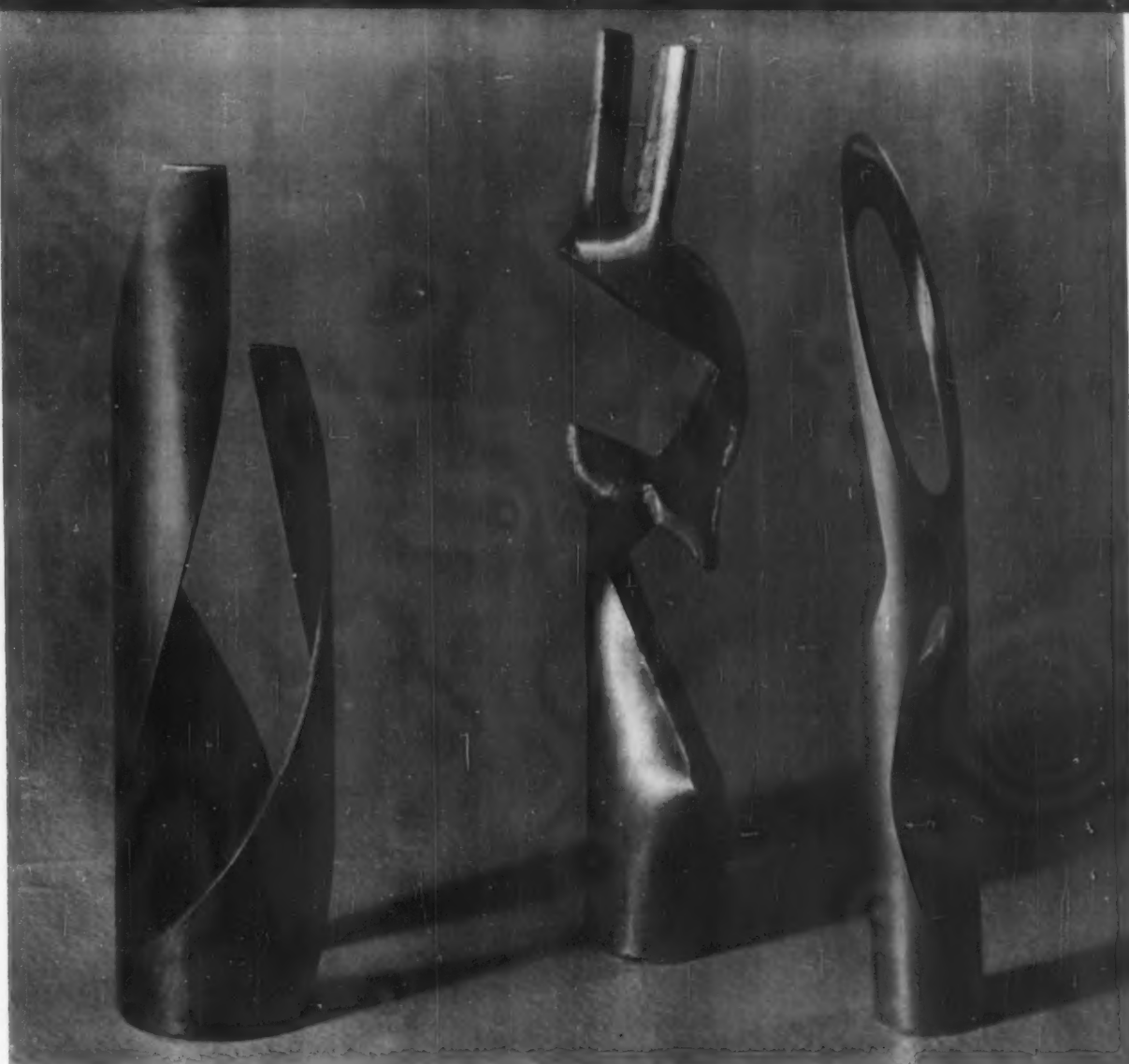


PHOTO COPYRIGHT, COUNCIL OF INDUSTRIAL DESIGN, LONDON



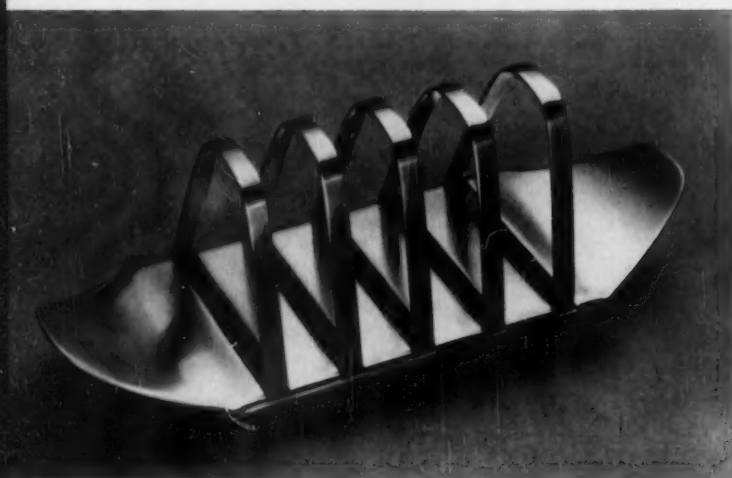


*During the first year of the new program, students confine their creative work to abstract pieces, such as these. These experimental activities help develop design sensitivity, but they have a major function in helping students get acquainted with various materials in order to learn what can be done with them. Manufacturers cooperated in developing the program.*

naturally mingle with students studying other aspects of design for industry, e.g., furniture and textile designers, potters and silversmiths, as well as with sculptors and painters; they thus become imbued to some extent with their standards and ideals. The college immediately adjoins the Victoria and Albert Museum with its fine collections of beautiful objects; while on the technical side, it also has as its neighbor the Imperial College of Science and Technology, which has already agreed to provide many useful facilities in the way of workshop practice and the services of its staff. The particular function of the industrial designer within a team, his very *raison d'être*, is to be concerned with the appearance of objects; he must, therefore, be trained in an institution which has the same primary concern. Above all, the system of education at the Royal College of Art is based on the tutorial system common to the older universities, and each

student is encouraged to learn on his own with individual attention from tutors and professors.

The entrance requirements for candidates call for passing at advanced level examinations for the General Certificate of Education in two of the following subjects: pure or applied mathematics, physics, chemistry, biology. Passing at ordinary level examinations in either English language or English literature is also required, as is one in mathematics if it is not one of the subjects included in the Advanced level. Some knowledge of metalwork or engineering drawing is also considered to be an advantage. In addition, students would be expected to show some evidence of a practical interest in drawing, modeling or design, which could be in the form of an Advanced level pass in art in the General Certificate of Education. The basis of the course is training for the diploma DesRCA (Designer of the Royal College of



AUTHENTICATED NEWS PHOTO FROM COUNCIL OF INDUSTRIAL DESIGN, LONDON

*This toast rack, designed by Robert Welch, was judged one of the best designs in production in 1958. The Council of Industrial Design is raising standards of British products.*

Art), which has the equivalent value of a university degree.

It will be sufficient to describe the engineering course to give a full idea of the wide field of training given in the few years. Similar training is given by the Royal College of Art in furniture design, ceramics, silversmithing and jewelry, industrial glass, textile design, and fashion design. The students are, wherever possible, mixed together in their training to give them the broadest possible outlook on industrial designing. Since the object of the course is to produce graduates of high academic attainment in the same way as in a university honors course, the whole of the first year is devoted to work fundamental to the concept of design. The first half of the year will be taken up with an introduction to design. During this time the students will be free to develop their abstract sense of form without thought of practical application. Students will concentrate upon it for a few months in order that a consciousness of classical perfection may grow and act as a source of inspiration when later they turn their attention to practical design problems.

The syllabus describes this first half-year as being divided: Two-dimensional design: proportion, light, surface; Three-dimensional design: space, structure, balance. It will also include instructions in the art and uses of photography. As examples of the subject matter of lectures in this section of the course, there will be: Light—light sources, photometry, shadow. Tone and color charts; Surface—roughness, polishing. Radiation and absorption. Perforated surfaces, meshes, grids, networks; Space—regular solids, envelopes; Structures—atoms, molecules, crystals; Balance—static and dynamic balancing of masses. The remaining three quarters of the time will be devoted to practical work in paper, cardboard, wood, plasticine, plaster, and metal. There will be certain set exercises, but also plenty of freedom for the development of individual inventiveness. Photography will

play an essential part. The second half of the first year will be devoted to elementary technology and will cover mathematics, metallurgy, engineering drawing, and architecture. In the second, third and fourth years, the student's activities fall into two main groups. There are first formal lectures, some given by members of the staff of the Department, others by university and technical college lecturers and extramural specialists. There are also visits to foundries, factories, showrooms and so forth. During the long vacations of the second and third years, arrangements will be made for students to undergo planned works studentship in selected engineering firms.

The second year's studies will cover an elementary design course, including the study of metallurgy, strength of materials, electrical design, heating and ventilation and presentation. The third year's studies will be on an intermediate design course, covering surface treatment and finishes, plastics technology and design, concrete technology and design, production engineering and elementary ergonomics. The final year is devoted to an advanced design course and to study of the sociology of design and the philosophical theory of aesthetics. The advanced design course covers structures, rubber technology, engineering economics and advanced ergonomics, while "Sociology of design" will bring the students into touch with the social changes of everyday life, the structure of human society, the past and present needs of industries and their customers and with future trends so far as they may be forecast. Throughout the course an effort will be made to create for the student a working environment similar to that which he will encounter after graduating.

His equipment consists of a drawing board, a rendering table and a modeling table, and when developing a design, he will in the early stages spend approximately the same time at each of these, visualizing in two and three dimensions. The final stage comes when the working drawings, the presentation renderings and the mock-up are all brought to a finished state. The presentation renderings and mock-up must be fit for submission to a sales department for preparation of literature, and the working drawings must be detailed enough for issue to the shops. At the end of the fourth year, every successful student will then be found an approved post in industry for nine months, for which he will be paid a salary. He will thus be able to merge his academic training into industrial reality before having to face the world entirely on his own.

This new course has been so widely welcomed by British industry that it is foreseen that the graduates from these courses will always be ensured of employment. The sound practical training the graduates will have received will, it is considered, give British manufacturers trained designers equal to the best being turned out in the United States and Germany, and in some directions go beyond it.

F. C. Livingstone, a writer who lives in London, England, prepared this special article at the request of School Arts.

Joyce Nill Truebig

*Bottles have their own peculiarities, and a little papier-mâché, plasticine, and paint make them into Bottle People. Children in the middle elementary grades enjoyed watching new personalities develop.*

## Making people out of bottles

Bottles have a lot of personality. Some are tall and graceful; some are short and squat. Some bottles have a certain elegance while others are quite humorous, especially when we start to imagine how they would look with faces, and how their shapes resemble human shapes. At Gotham Avenue School we found that we can make a person out of almost any bottle, if we use our imagination and ingenuity. First we had to collect bottles. Any size would do, but we had to remember that very small bottles require more patience

and precision than larger bottles. Most of the children wished to make some small changes in the shape of their bottles. Possibly the cap of the bottle was too square to suggest a head: a bit of plasticine clay could be added to round it off. Sometimes the cap was removed, a round head made on the neck of the bottle; and the cap then added as a hat, or crown for the person.

A few of the bottles had handles, which became the arms of the person. Some of the other children wished to add

*A group of Bottle People, made by pupils of the author in the third through sixth grades at the Gotham Avenue School.*







*Bottles were remodeled with plasticine and papier-mâché in order to form heads and other features before final painting.*

plasticine arms to their bottles. We talked about making arms in the shape of handles so that we would not depart too far from the nature of the bottle. We did not want to add too many things or the shape of the bottle would be lost. We did not want it to be just a base upon which to build a plasticine figure. The shape of the bottle had to be an integral part of the design.

We covered the whole figure with thin strips of paper toweling and paste. Neither the shiny glass or the oily plasticine is very receptive to tempera paints. The single layer of papier-mâché which covered them gave us a good surface on which to paint. It also made the object much more durable. We used very small brushes to paint our bottle people. The shapes of the bottles encouraged the use of decorative effects, so that many of the bottle people were not painted in ordinary dress, but in fantastic costumes of the children's invention. A final coat of shellac gave our bottle people added durability. This project gave us another opportunity to use our skill and our power of visualization to create something of value from scrap materials.

Joyce Nill Truebig is an art teacher in the Gotham Avenue School, Elmont Schools, New York. She lives in Bayside.

*Children at work decorating their Bottle People. As far as possible, each bottle was permitted to determine the final personality the figure would assume as it became a person.*



*High school classes not too interested in the usual crafts came to life when they discovered the thrill of exploring creatively in wood. They learned how materials and processes produce appropriate design.*

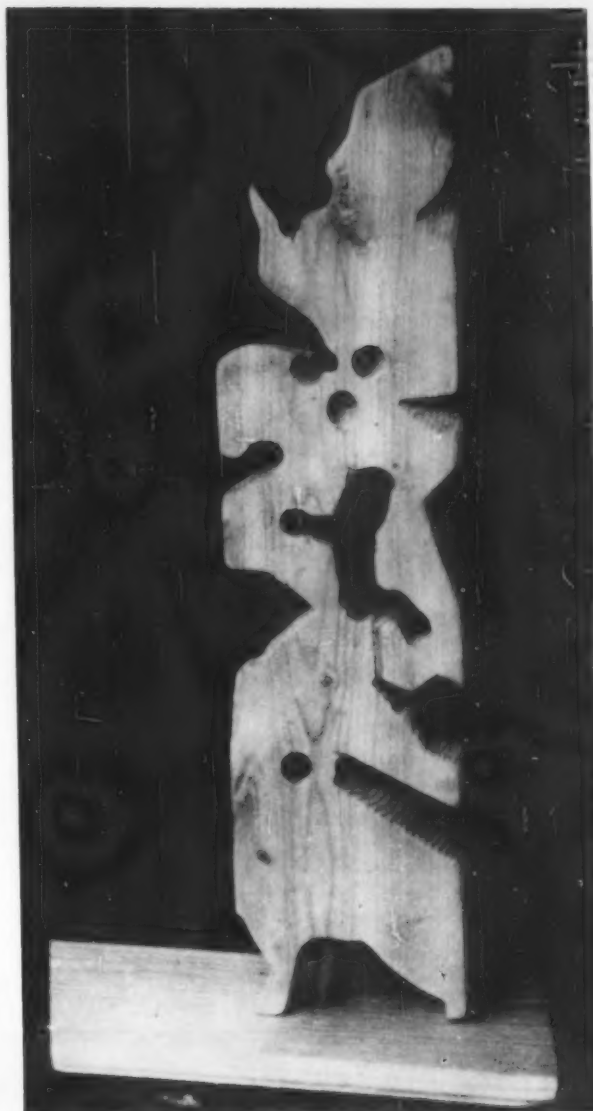
### Josephine R. Krum

As a substitute craft teacher at J. P. McCaskey High School in Lancaster, Pennsylvania, I started with no preconceived ideas about what the students would do. I had been told that they were a difficult group to work with since there was no particular interest in crafts. The course was taken for a needed, easy credit; perhaps a third had chosen it. There were four sections totaling fifty-four boys and two girls at the tenth, eleventh and twelfth grade level. The advanced group (juniors and seniors) had had varied experiences, primarily with graphics and the building of stage scenery. The other groups, in spite of a mixture of grade levels, had had no previous high school craft experience. The majority of these pupils were young men, being much more mature than I had expected. Because of this fact and reputed lack of interest, I felt they needed work which was different from

## EXPLORING WITH WOOD

previous experiences or ideas which they might have had in crafts.

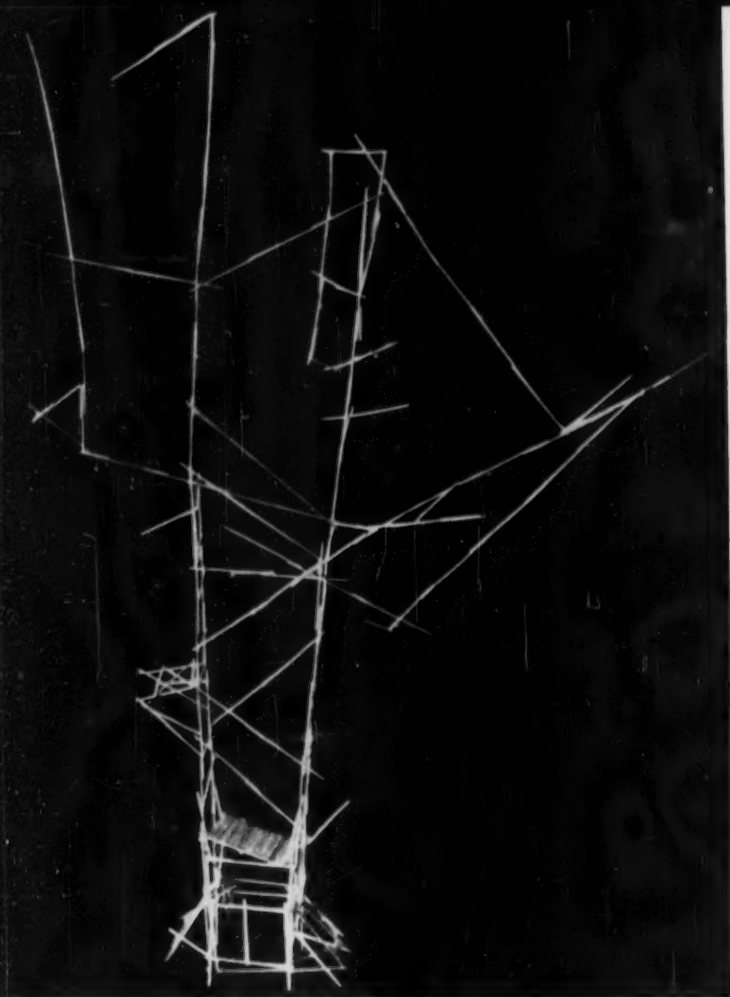
Projects would have to be something which they really wanted to make and use. The end product becomes increasingly important, for older students are dissatisfied if they cannot meet their own expectations. Possessiveness is characteristic of this age, at times more so than the teacher may expect or recognize. Also they tend to compare their work unfavorably with what they can buy in shops. Materials would have to be resistant because of their excessive energy (there were weight-lifters, wrestlers, track men and football players among them) and tools would have to be man-size and able to take hard usage. We found wood planes, wood files, coping saws, c-clamps, brace and bits, a dozen small bench vises, a few large wood chisels, several



*Abstract wood sculpture by Henry Kirchner, eleventh grade.*

sets of hand wood-carving sets and sandpapers. So we selected wood as the medium.

Wood requires both strength and thought. We like the feel and warmth of it as well as its odor, its firm resistance to the tools and its natural beauty in the raw state as well as in a finished product. Wood was available in lumber mills; it was scrap material to the dealer but suited our needs in size and shape. The quantity was unlimited. Through a pattern maker at an iron foundry, we were able to get the harder woods in various sizes and odd shapes, which were the fall-off after cutting. In the wood collection were many pieces of two-by-fours about eight inches in length, excellent for wooden spoons and possibly forks. Some advanced students tackled the spoon first. There was a short explanation of the function of a wooden spoon, the purpose of the



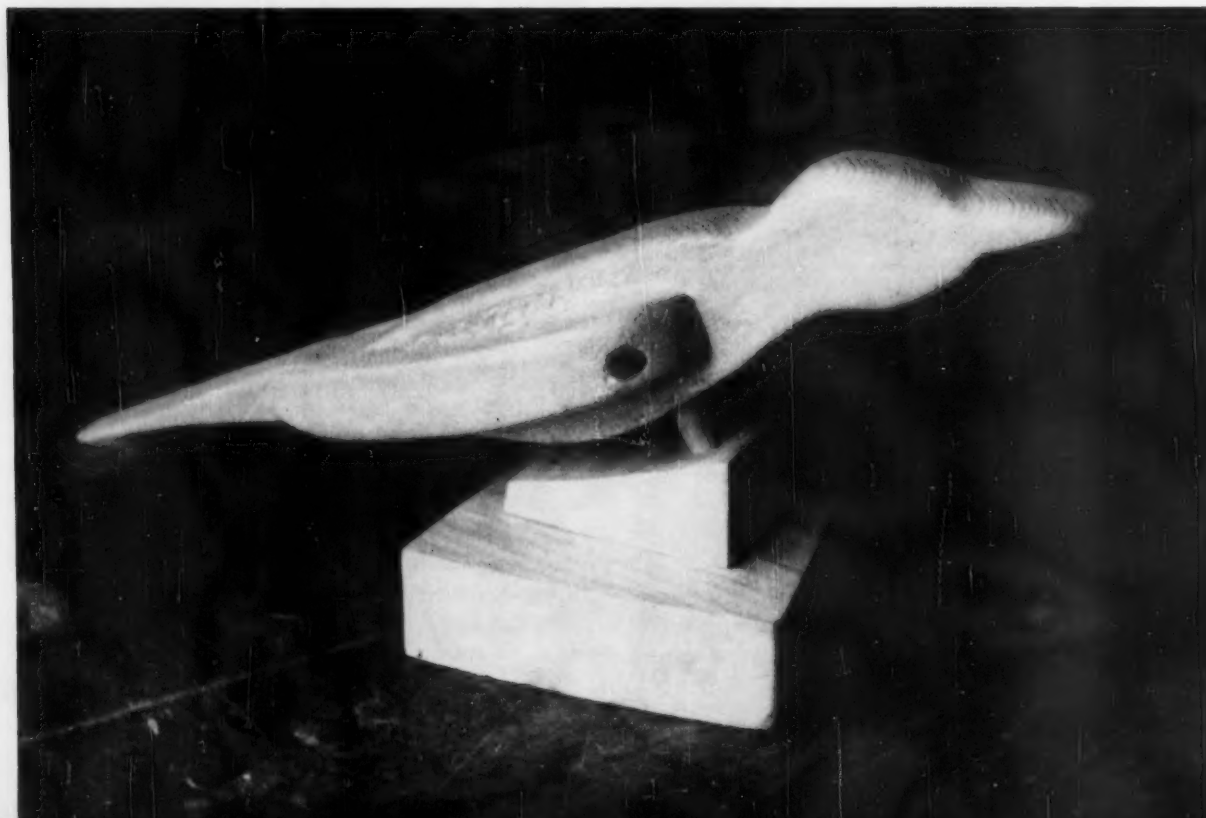
*A delicate wood construction by Dennis Cole, tenth grade.*

spoon bowl and the handle in relation to the bowl, as well as how it should fit to the hand and work in the hand. The students' first step was to draw with chalk on the wood an outline of the top view of his spoon; then with the coping saw he cut away excess wood. After this form was cut he started with chisels to cut the bowl; this was held securely with a bench vise or a c-clamp. The handle was usually the last part to be formed because of the tendency to break at its narrowest part. Some students were able to work out the whole form as one. Coping saws were used whenever possible to remove large areas of wood which would have been tedious and time-consuming. Wood files were used to reduce the sanding job and were helpful in making better relationships between forms. Smoothing was done first with heavy, then fine sandpaper, and finally with extra fine steel wool. Beeswax and vegetable oil gave a variety of finishes.

Success with the spoon led to forks. This time we added another material, heavy gauge copper, to be used for the prongs. The wood handle was fastened to the metal of the fork by allowing a projection which was inserted into a slit, cut to size, in the wood; holes were drilled through the wood and metal and the two were riveted together. Here we talked about the difference between a fork which we take to our mouth and one used for serving. I emphasized that the prongs of a salad fork are used for draining oil and lifting in combination with the spoon, rather than for actual picking up of food.

Small triangular blocks almost identical in size and shape had come from the pattern maker. One boy had

*James Dornes, grade ten, was one of the very few students who based his work to some degree on something from nature.*





finished the metal repoussé and needed something to do. He went to work with a bottle of glue and a fistful of blocks. He wanted specific suggestions but I told him there would be more fun and interest in seeing for himself what he could do with the material; the end product then would be his and not mine. Other boys became interested as the piece grew. Some of them chose to intersperse varied types of wood and different sizes and shapes. They learned for themselves that balance had to exist. Wherever the weight was not right the pieces would fall off, regardless of the quality of the glue. We soon referred to them as architectural.

As the forks and spoons were finished they were put on display in a showcase, and interest developed in another group who decided to make objects from wood. Some of these boys were not interested in forks and spoons. Since they had so much wood to choose from, I suggested they experiment with oddly shaped pieces and put them together. One boy made a bird, one of the few naturalistic results. Others selected flat pieces and carved bowls or serving platters. Checker and chess sets occupied a few boys. One boy seemed to lose direction entirely until I suggested that he take a piece of wood and start drilling with brace and bit, cutting out sections with a coping saw, to evolve some form for a piece of sculpture. Another boy working near him saw it. He had been unsuccessful with a spoon and wanted to try the same thing only working with a larger piece. The idea eventually spread to boys in another class.

In the sculpture experiences they had unknowingly selected the abstract direction, although there had been no restrictions as to approach. Their choice was probably due to exploratory experiences in elementary and junior high school. Possibly there was little criticism or explanation in previous free-form experiences compared to those where realistic forms were used. The abstraction may have resulted not so much from an understanding of pure form but as an escape. The boys were highly critical of their own ability to make realistic form and considered the unrealistic much easier.

Student reactions were varied throughout all the experiences. Their main question was, "Why is sculpture a part of a craft program?" This was explained as simply as possible: the making of anything is both an art and a craft and the individual should be a good craftsman to achieve satisfaction in the end product. In spite of the abstract direction which they took willingly, they still questioned their own decisions. They said: "This is fun, but what is it?" So I felt the necessity of defining "abstract" in simple words. I used music as an example, jazz and especially the "rock and roll," associating the sound and rhythm of the music which tells no story with their sculptured abstract forms. Then I compared the ballad with sculpture of a human form, both of which tell a story. They seemed to understand and accept the explanation in the immediate classroom. Away from class it was a different situation, but this, I feel, was not their fault, but was due to inexperience on the part of their associates. They were not articulate enough to explain the



*This fantastic figure of wood was constructed by a tenth grader, James Hamilton. Interest in wood was contagious.*

experience of abstraction, even though they could explain the process of making sculpture.

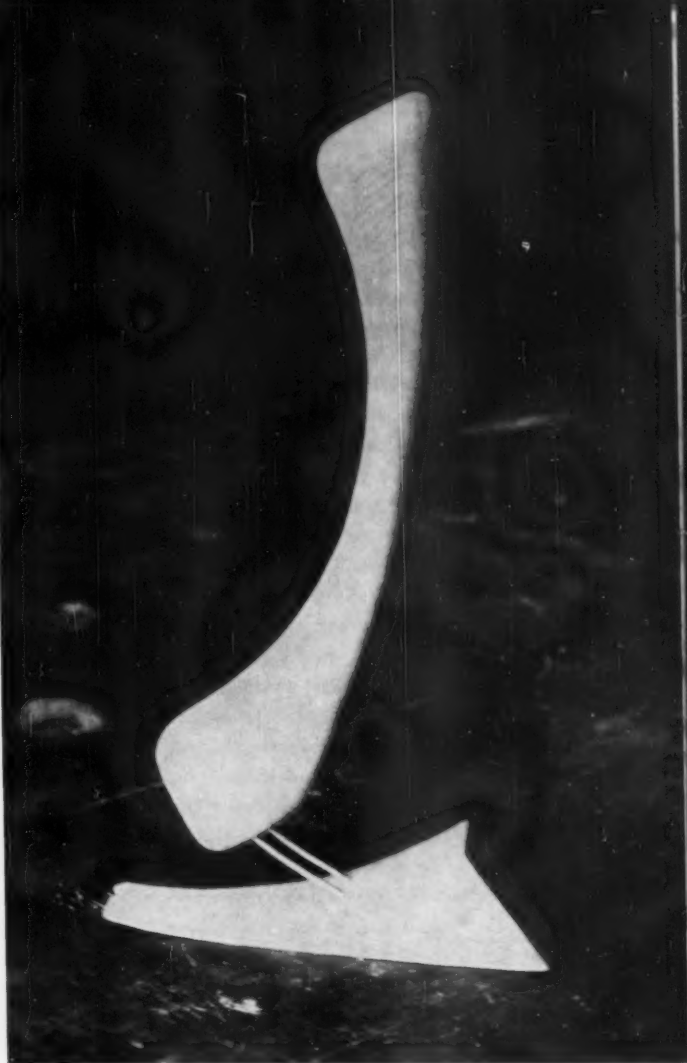
The teaching method in all the experiences was simple. It had to be, since their attitude, especially in the beginning, made them unwilling to listen or participate in any lengthy discussion. Little can be taught concerning a material before the actual experience of working with it has given some understanding. To me these experiences in wood were only exploratory steps for the students. I know each student could go far beyond what he had accomplished, given time. The beginning stages of exploration are always the most difficult for the student and the teacher. Students must be encouraged continually so that confidence develops from within. Only when the student reaches an impasse in his individual problem can the teacher discuss design. Even then my suggestions were not obligatory for them and the end result was the student's final decision. In relation to design we usually discussed the varying of shapes and

*Ronald Rittenhouse, right, almost went completely abstract.*

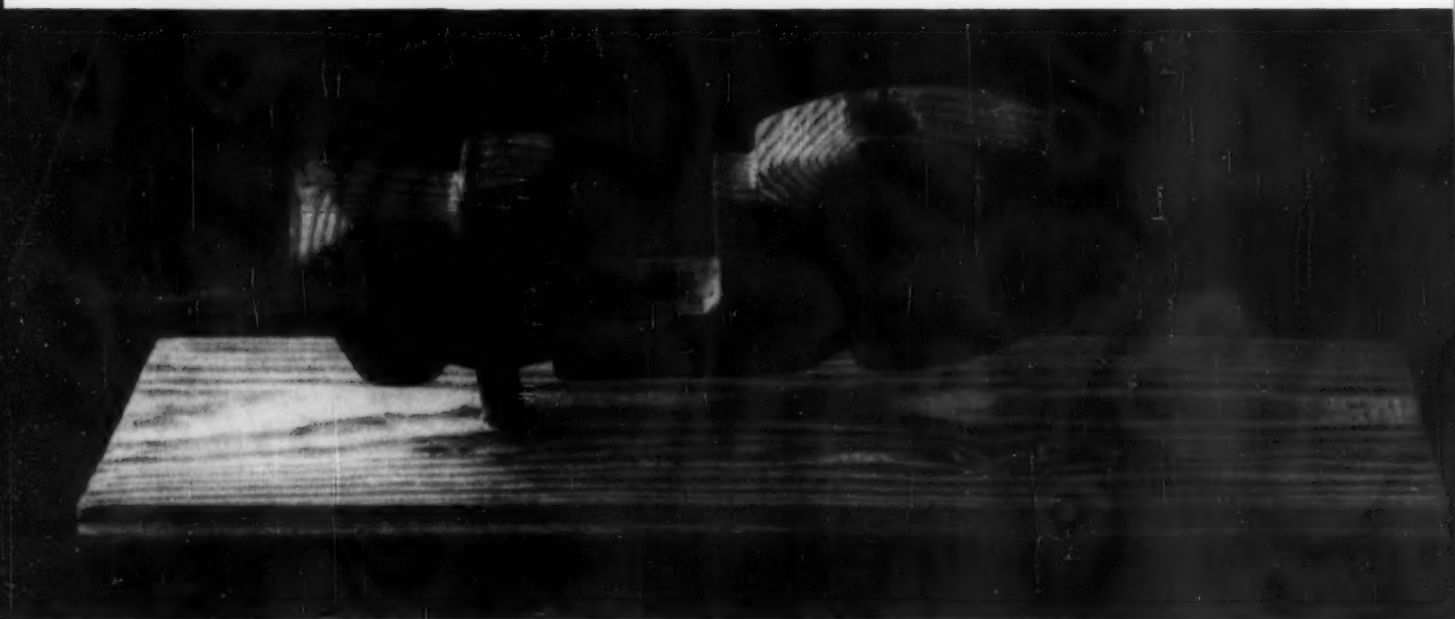
spaces, the grain and color of the wood and the feel of the wood to the hands as well as what the eye could see.

While the students were working on their projects I thought many times about what could happen with students in a situation where good supplies and equipment are not limited. I realized that their interests could have been easily swayed simply by offering materials and allowing them the opportunity to make products of immediate personal appeal without much thinking. Students, especially on the high school level, see and understand, when using an inferior material, that their results are poor. In all too many cases they blame their own ability rather than the direct cause—the material. Cost is of proper concern in the art program but the cost of the best materials is offset by the length of time the student is willing to take to achieve an end product which he as well as others can respect. With poor materials and tools he rushes through wastefully and haphazardly to earn the grade. With good materials and tools, with time to explore, he has the fullest satisfaction of making and wants to keep what he makes. To me it is all a matter of the value of time.

Josephine R. Krum graduated from Kutztown, Pennsylvania State Teachers College, received her master's degree in ceramics at Alfred University where she held a position as graduate teaching assistant. She has taught art recently at various levels in New Hope and Lancaster, Pennsylvania.



*Henry Kirchner, eleventh grade, tried a number of different approaches to wood. Work shown is by students of the author.*



Ralph M. Pearson

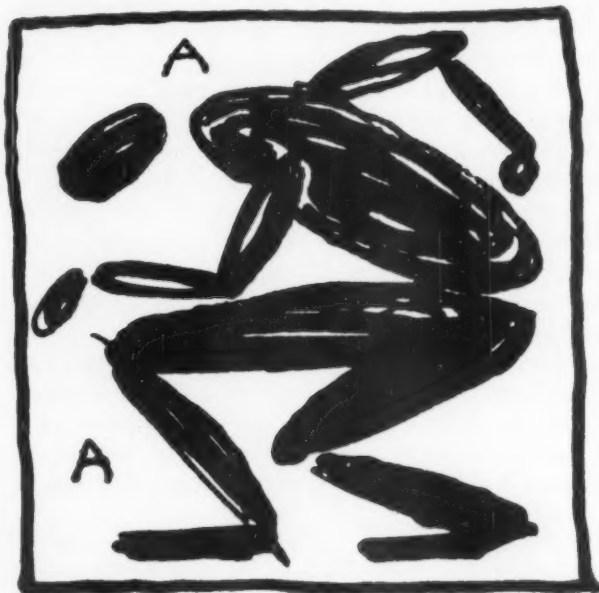
Fifth of a series of articles on design, prepared for us just before the author's untimely death on April 27, 1958.

## Human figures can be sausage shapes

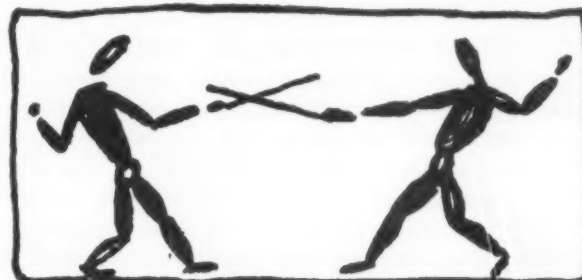
Human figures can also be translated into shapes by beginners in drawing who have no technical skill or knowledge of anatomy—by a very simple stunt—the "sausage" method. Human bodies have parts—torso, hips, legs, arms, feet, hands, neck and head. These parts can be represented by a rough and flat free shape that takes on the essential character of each; then they can be put together to make a *symbol* of the whole. Note the word, "*symbol*." A "symbol" has meaning; it stands for something. The theory here is that it is more important, in art, to get eloquent meaning than to portray facts with skill. Anyone can make a symbol that is recognizable; five- and six-year-olds love to do it. The parts can be put together in a way that expresses action—running, jumping, sitting, standing stiff and straight, slumping, walking or what you will.

But another important point emerges. These symbols are also shapes. And when put together to express action, they are very likely to make an interesting shape-pattern. The variety of the shapes themselves and of their movements

1 A sausage drawing of the human figure, within a square.



## EXPERIENCING CREATIVE DESIGN



2 Sausage drawings that tell stories. Some are very crude while others take on real character. On the following page the author discusses which of the above looks best and why.





JAMES P. CELESTANO PHOTO

3 In the above painting a student carries over flat symbols of human figures into his painting, adding color and texture.

alone assures this. When this inherent shape-pattern is recognized and played up as a design, in addition to playing up meaning, we have the makings of a work of art, no matter how crudely expressed. Children of any age will quickly grasp this duality and play with it; adults can do the same. As a beginner practices, his deftness gradually increases; shapes take on more character, the power to express both values increases rapidly. Fig. 1 is an example of this different kind of "space-man;" Fig. 2 shows the possibilities of telling stories with designed human symbols.

To keep designs like these simple for early practice, there should be no overlapping of parts for such get into three dimensions; they come later. Keep strictly to flat-pattern, making any additional symbols, like a football or bird, also flat and woven into the total design. Then the spaces around the symbols must also be felt; they are as much a part of the design as the symbols themselves. In Fig. 1, for instance, space A is a foil for the blacks; is it the right size? Should the blacks hit the frame? In Fig. 2, some do so. Which *looks better*? The point is to sense all such qualities and make your own decision. In Fig. 2, note that the symbols in (a) are very crude and that some others, especially in (c) and (d), take on more real character; upper arms and legs are larger than lower ones, the torsos taper to the waist, feet and hands are truer to life. This is a way of studying "life drawing" which starts with *life* instead of

drawing with skill. Children will "eat it up" with the excitement of the feel of power it gives them. In these five exercises, which division of black and white spaces *looks best*? The answer would seem to be that in (a) and (b), the division is too equal; the effect gets monotonous. In (c) it is repetitive. In (e) interest increases because of more variety. And (d) is by far the *best* due to the much greater diversity; there is enough open space to give a rest area and to concentrate interest on the dynamics of the varied actions.

Fig. 3 shows how these flat symbol figures can be woven into the design of a painting in color—with the color adding its charms to space and movement sensations. But another element is added—texture—the texture of flowing fine lines. The design is still very simple, kept to flat-pattern, except in the lower left corner, where overlapping of symbols points the way to the next big step in complexity—the dealing with subjects in deep space. In theory, the two methods should not be mixed in one picture.

For present purposes, this is as far as we need go into complexity. We are dealing only with the simple aspects of creative design—those which can be *experienced* as a foundation on which to build; we are not interested at the moment in masterpieces. The *experiencing* is what matters.

Ralph M. Pearson, who prepared this series of articles for us, was widely known for his book, *The New Art Education*.

## A NEW SCRATCH TECHNIQUE

Maria K. Gerstman

Round cheese box covers were used by a Marion, Iowa third grade in portraying individual versions of their community as it might be viewed from a round window. Experimenting with the plastic-coated surface, which would not take paint, they discovered an interesting scratch technique. A crack filler (in this case, Plastic Patch) was secured at a paint store. A small amount, mixed with water to a soupy consistency, was rubbed onto the disks with the fingers, leaving a thin film, and allowed to dry. Black India ink was then brushed over the film of crack filler. When it was dry, a pencil was used to scratch off the ink, exposing the white background in contrast with the black ink that remained.

Because lines once made could not be erased, children found it best to start scratching at the bottom of the disk for the large objects near them, later scratching in the smaller objects in the distance which are partly hidden by things in front. Cardboard milk containers would serve the same purpose, or ordinary cardboard could be coated by dipping it in melted paraffin before starting the process. Other materials would no doubt work in much the same way.



HOWARD GERSTMAN PHOTO

*A third grader scratched this design on a round box cover.*

Maria K. Gerstman, who lives in Marion, Iowa, taught in progressive schools in Vienna. The example shown was made in a Marion third grade class. Rose McMullen was teacher.

*A fifth grader inventively cut and twisted this bird form.*



SCHWEINHARD STUDIOS PHOTO

## MAKING ALUMINUM MOBILES

George C. Lindemer

The elementary teachers in South Orange and Maplewood are constantly experimenting with new kinds of materials and new methods. These experiments broaden areas of experience, stimulate imagination and interest. Materials may come from the supply house or from scrap material. The aluminum foil pie, cake and dinner tins are well known in food shops today. The following tools are necessary: scissors, staplers, string, and a variety of scraps of colored paper. A simple demonstration of cutting one of these tins into shapes and forms illustrating how to cut, bend, twist, turn and curl will stimulate interest and provoke the imagination of pupils to experiment creatively. You develop from a single plane many varieties of planes that take on abstract form which may be identified with reality. Youngsters may wish to identify these mobiles with real or imaginary names. The cutting of these aluminum tins is not recommended in the primary grades since the sharp edges can be a hazard to the younger child.

George C. Lindemer supervises in these New Jersey schools.



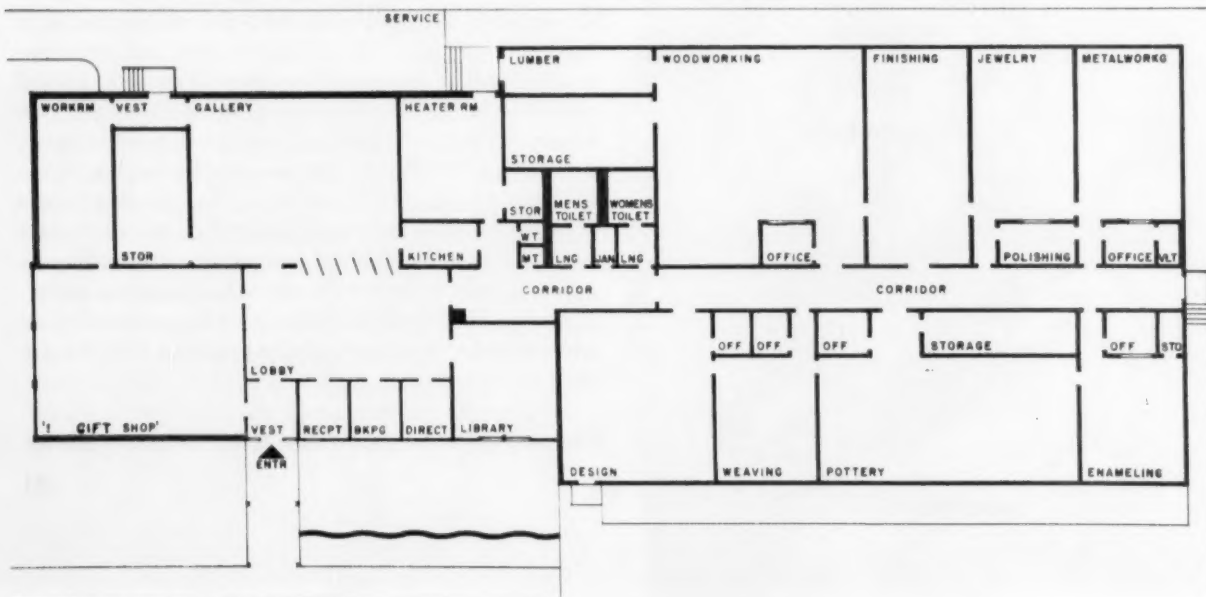
Exterior view of the new Craft Center building, Worcester, Massachusetts. New building techniques helped cut the costs.

## WORCESTER CRAFT CENTER

Climaxing some years of devoted effort toward this goal, the new Craft Center building at Worcester, Massachusetts was dedicated on December 5. For a number of years the center had been located in the Salisbury Mansion, but the classes and other activities soon outgrew the structure. Built at a cost of a third of a million dollars, it is a tribute to its director, Robert W. Gray, his staff, and the community leaders who have brought it about. The success of this venture should stimulate similar activities in many other communities. Originally given an assist by the community chest, the center program has been developed through student fees and some contributions from individuals and trust funds. How they managed to support such a venture would make a good story, and they would probably be glad to tell about it because they are justifiably proud. We're proud that the School Arts advertising manager is a trustee.

PHOTOS BY MARVIN RICHMOND FOR SCHOOL ARTS

Above, a view of the Craft Center gallery with a student exhibit in place during the dedication on December 5, 1958. A floor plan is shown below. The center includes studios for various craft activities, a library, a salesroom, offices and storage space, as well as auxiliary workrooms. It may be the first major building planned exclusively for craft activities.





**Should art and industrial arts be combined, within a single department, in order to achieve adequate emphases on both creative design and working skills where they are applicable?**

## issues of the day

**John Pankiw, director of art, Winnipeg, Canada, says:** Creative art has transformed the environment of man by linking together knowledge, labor and moral energy. In his workshop he has nurtured intellectual curiosity, ingenuity and joy in creative pursuits. He has learned that design is the common denominator of all the arts and that a creative approach to emotional excitement with a resultant refinement of product demands a daring departure from the primitively dull routine of doing by imitation and the apathetic observation of "expert methods."

**August Freundlich, director, art department, George Peabody College for Teachers, Nashville, Tennessee, says:** The differentiation between departments of Fine and Industrial Arts is an artificial one first created by scholastics who liked to break things into neat little bits. As a consequence both departments have lost much which might be of great potential value to the student. What is needed is not an Industrial Arts oriented person or a Fine Arts oriented person but an Artist-Craftsman, who knows the aesthetics of his chosen work yet has a command and respect for the tools and processes of the work. While some such orientations are now being produced by separated departments, the constant bickering so common between these two areas cannot but have detrimental results for both students and teachers.

**Ivan E. Johnson, head, art education department, Florida State University, Tallahassee, Florida, says:** No one would deny that art and industrial arts each have certain values, purposes and problems that are unique. When these two areas are combined within one department, they profit by the solution of common problems and mutual respect for one another's aims. In this instance both seek creative action and experimentation with processes that may range from the painting of murals to turning on the lathe. The relationships of the two areas bring insights and stimulation that could seldom be achieved if art and industrial arts remained apart.

**Harold J. Brennan, department head, School for American Craftsmen, Rochester Institute of Technology says:** The differing objectives of the fields, with resultant differences in content and method, suggest separation. But there are many areas in which the two fields can be harmoniously joined—to the betterment of both. Perhaps there could be certain

courses given and a collaboration with joint exploration and evaluation of further developing opportunities. Both art and industrial arts are vast empires, and their combination would be difficult to achieve even if it were quite apparent that their juncture would be educationally desirable—human nature and ambitions being what they are.

**Robert Drummond, director of fine and industrial arts, public schools, Springfield, Massachusetts, says:** Such a plan would be Utopian indeed if graduates from the teachers' colleges or art schools were so versatily and broadly trained. Unfortunately much needs to be done in teacher preparation before such a plan, generally speaking, could be expedited. It would be ideal if both art and shop teachers could receive a common three-year training period in creative design, craft skills, as well as machine orientation. Then, as majors in the last two years, they could follow their major interest and receive a fifth-year degree. A series of integrated laboratories would be a step in the right direction.

**Chester J. Abend, visiting professor in design 1958-59, State University of New York College for Teachers, Buffalo, New York, says:** Piano-making and composing could both be regarded as creative efforts . . . but should they be lumped together? Hardly, yet it is obvious that each is meaningless without the other. This far-fetched analogy points up the strong link that must exist between skill and expression—between materials and concepts. Art and industrial arts are merely two hands of the same body and as such can remain distinct but surely not dismembered. The contribution of industrial arts education is that it provides the student with the actual experience of construction and with a method of working and approaching work . . . also with the means to bring ideas to life. Ideas, however, mean design-logic and design touches straight on art. Education falls short if it fails to recognize that idea (which is art) is at least equally as important as things . . . that art is the motivation and expression of both our needs and our aspirations. It follows that if we equip students with the useful knowledge of materials and methods without a real understanding of art or design we equip them with blindfolds. If industrial arts or art is to become more than a sedative exercise it must accept the precept that neither genuine achievement nor beauty will be found in craft without art nor art without skill.

# O. HOMMEL

has a  
complete  
selection of

- UNDERGLAZE  
COLORS
- GLAZE STAINS
- PREPARED  
GLAZES

- ENGOBE STAINS
- OVERGLAZE  
COLORS
- UNDERGLAZE  
PENCILS and  
CRAYONS

to add  
beauty  
to your  
ceramic art  
projects!

Use O. Hommel diversified  
colors, stains and glazes.  
They will always give true,  
lasting solid colors or tints.

## FREE HOMMEL CATALOG

Write TODAY for your  
fully illustrated copy  
and free technical in-  
formation.

"The World's Most Complete Ceramic Supplier"

**THE O. HOMMEL CO.**

Pittsburgh 30, Pennsylvania  
WEST COAST—4747 E. 49TH ST., LOS ANGELES

## ITEMS OF INTEREST

**Felt-point Markers** A new felt-point marker called Squeezeo is offered by Marsh Stencil Machine Company of Belleville, Illinois. It is a plastic bottle which holds  $\frac{3}{4}$  ounce of water-color ink, in any one of eight vivid colors. Give the bottle a squeeze, the ink feeds through a felt point and marks—with bold or fine line—on paper, wood, cloth, or any other porous surface, without striking through. This device is convenient for lettering, marking, chart-making, drawing, coloring, and other uses. Soap and water quickly remove the water-color ink from hands and clothing. Squeezeo markers are available from your school supply dealer or art store.

**Color Guide** The Craftint Manufacturing Company now includes its new MIX-N-MATCH Color Palette Guide (usually 50 cents) free of charge in ten of its oil color outfits. The color guide is based on a professionally selected palette of eight of the most popular oil colors. It assists the beginner in mixing the exact color he desires for still life, portrait and landscape painting. Other practical suggestions for the use of color are included. Send 50 cents to The Craftint Manufacturing Company, 1615 Collamer Ave., Cleveland 10, Ohio for a copy of MIX-N-MATCH or visit your art supply store to see the variety of oil color outfits in which the guide is included at no extra cost.

**Enameling Manual** Offered at no cost to teachers and group leaders is a manual-catalog giving many hints on metal enameling for beginners and more advanced students. In addition to the technical help, the catalog illustrates and prices a wide range of enameling accessories, findings, and equipment. For your free copy of this 62-page manual-catalog, please write Vanity Fair, Box 991, Evanston, Illinois.

**Motion Pictures** Association Films' 1958-59 catalog of Selected Motion Pictures has recently been published and is available free of charge to interested educational and community organizations. The 40-page catalog describes the several hundred free and rental 16mm. sound motion pictures offered by the company for classroom, club, and organizational showings. Copies of the catalog are available at no cost from Association Films' regional distribution centers in: Ridgefield, N. J., Broad at Elm; La Grange, Ill., 561 Hillgrove Ave.; San Francisco, Calif., 799 Stevenson St.; and Dallas, Texas, 1108 Jackson St.

## TAK... PLASTIC TACKS IN-A-TUBE



### CUTS DOWN DAMAGE TO SCHOOLROOM WALLS

Invisibly mounts papers, posters, decorations, or exhibits in the classroom, on the bulletin board, and in the halls. TAK does not mar the surface, eliminates pinholes and tack damage.

**USE TAK FOR THAT "PUT-UP" JOB**  
Dab TAK on the back of the paper—let it dry—then mount it rubbing gently on any type of surface. It will stick permanently, yet can easily be removed and reused.

Only 65c a tube from your regular school supply distributor or write:

**DELKOTE, Inc.**  
EDUCATIONAL AIDS

BOX 1335  
BOX 574

WILMINGTON, DELAWARE  
BERKELEY, CALIFORNIA

## 30 BRILLIANT CERAMIC COLORS...

Ready for  
instant use!



No fuss! No muss! Just dab a brush into any of the 15 Liquid Overglaze or 15 Liquid Underglaze Colors and apply directly to your ware. Each set contains strong, deep colors. Easy to mix for intermediate shades or with white for pastels. There's one full ounce of color in each underglaze jar; 1/10 lb. of color in each overglaze jar. Each 15-color set is attractively boxed with two multi-purpose brushes and instructions. Order today!

**B. F. Drakenfeld & Co., Inc.**

45-47 Park Place, New York 7, N.Y.

Gentlemen: Attached is my check for . . .

- ☐ Liquid Overglaze Set.....\$10.00
- ☐ Liquid Underglaze Set..... 5.00

I will pay shipping charges.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/ZONE \_\_\_\_\_

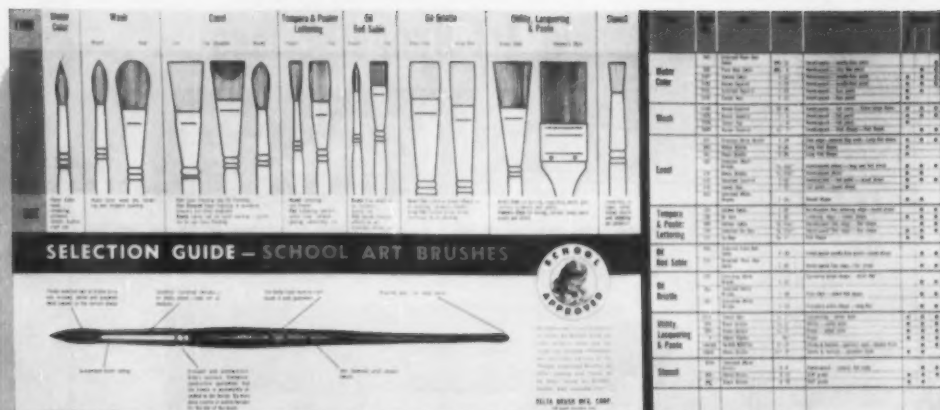
STATE \_\_\_\_\_

- ☐ Send me the Drakenfeld catalog of prepared glazes, clay bodies, electric kilns and other ceramic supplies.



**Drakenfeld**

## Delta takes guesswork out of selecting school art brushes



Delta offers to the art teacher and art supervisor a comprehensive chart which makes the choice of proper brushes simple and sensible. The "Selection Guide-School Art Brushes" presents in concise graphic form the following information: the type, shape and use for all styles; the important features of each brush; the hair used; the sizes; the suggested school grades for each style number. The chart folds to 8½" x 11" and opens to 11" x 25" for use on a wall or bulletin board. It may be posted as a permanent reference guide for use by each member of the department.

Soon to be released is another publication designed specifically for art teachers entitled "Check List for Better School Art Brushes"

**delta**

brush mfg. corp.

120 south columbus avenue, mount vernon, n. y.

Write today on school stationery for your free 11" x 25" wall chart.



Why argue? Everybody wins with SPEEDBALL. Five styles and 36 points . . . 4 Steel Brushes . . . give you the widest choice of lettering combinations or finished drawings with a flair. For professional work specify SPEEDBALL.



C. HOWARD HUNT Pen Co., Camden 1, N.J.



Your Assurance of Superior Quality at  
Your School Art Budget Prices . . .

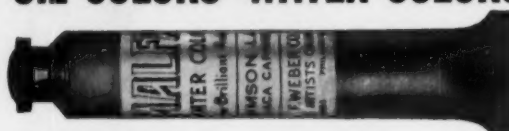


Malfa Oil Colors  
in Studio Size Tubes  
4" x 1"—48 COLORS

WEBER

MALFA

OIL COLORS-WATER COLORS



Malfa  
Water Colors  
in Tubes

3" x 1/4"—48 COLORS

No need to compromise quality for price if you buy MALFA Oil and Water Colors. They are pure, brilliant and reliable with excellent working properties and brush response.

Both lines conform to specifications of the American Artist Professional League. Oil Colors conform to CS98-42.

Color Cards and Price Lists on Request

F. WEBER CO.

MANUFACTURING ARTISTS' COLOMEN SINCE 1853  
Philadelphia 23, Pa. St. Louis 1, Mo.

Specify "MALFA"—Through Your Weber Dealer or School Supply Distributor

a new art tool!

x-acto<sup>®</sup>  
SAFETY-GUARD  
KNIFE\*

\*Pat. Pending

Sliding metal guard for absolute safety in carrying, handling and storage. Accommodates the regular surgically-sharp, instantly interchangeable X-acto blades. Won't roll off inclined surface.

Guard Adjusts  
to any Position



Chuck principle—1/2 turn and guard moves freely outside of knife.



Pull until blade is covered (or any in-between position); 1/2 turn locks guard.

x-acto



No. 1G (Illustrated) \$1.20  
No. 2G (Not Shown) \$1.50  
(Heavy Duty Model)

Send 25¢ for latest "Buying Guide."

X-ACTO, INC.  
48-89 Van Dam Street  
Long Island City 1, N. Y.

Ceramichrome<sup>®</sup>  
CALIFORNIA'S  
FINEST  
PREPARED CERAMIC COLORS

offer Teachers and Students

3 TYPES OF EASY-TO-USE UNDERGLAZES  
"Smooth, intermixable, water-soluble colors"

24 TYPES OF BEAUTIFUL INTERMIXABLE GLAZES  
"Innumerable glaze combinations"

7 TYPES OF EXCELLENT CLEAR GLAZES  
"Glossy to satin smooth clear matt finishes"

Write for complete information on Ceramichrome's brush-on one-fire ceramic colors and glazes that are the solution to promoting a more balanced and successful school ceramic art program.

CERAMICHROME LABORATORIES, School Dept. SA-1  
2111 West Slauson Ave., Los Angeles 47, Calif.

TEACHERS' BUYING GUIDE



Fully illustrated with hundreds of art and craft items to help make your teaching easier—results more exciting. You're sure to find a wide variety of items to fit your every need. Write today for Teachers' Buying Guide—free to teachers.

DWINELL ART & CRAFT SUPPLY

Dept. SA-19 2312 National Road Wheeling, W. Va.

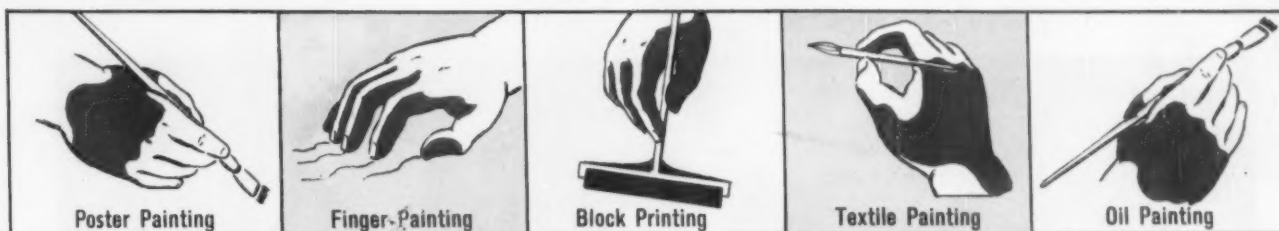
# ITEMS OF INTEREST *Continued*

**Preserving Plant Life** The Shellac Information Bureau offers a method for preserving leaves, wild grasses, flowers, cattails and other outdoor plant life for use during the winter months—perhaps as decoration or floral arrangements. Plants should be hung in a room at normal temperature for about a week to dry out the excess moisture. They should be hung from the stems to prevent twisting. A preserving coat of thinned, pure shellac can be applied by dipping or by spraying. Keep the plant hanging until it is dry. For a free booklet giving hints on how to use shellac and the wide variety of things you can do with it, please write the Bureau at 51 Pine St., New York 5, N. Y.



**Work Holder** Shown here is a new combination vise and work positioner currently being offered by Wilton Tool Mfg. Company. The unit may be used on benches, pallets, study or school work tables. The lightweight vise has a moveable jaw, providing tight, smooth action for holding wood, metal, plastic or other material. The work positioner, called Veep PowRam, allows for both vise and the item it's holding to be adjusted to any position and instantly locked in place. For complete information on this new unit, including a free folder, please write Wilton Tool Mfg. Company, Schiller Park, Illinois.

**Power Tools Catalog** A newly revised 88-page catalog, describing the complete line of Delta Power Tools and accessories is available at no cost to School Arts' readers. Some of the industrial tools described are drill presses, grinders, shapers, planers, jointers, metal and wood cutting lathes, tilting arbor saws, unisaws, band saws and radial saws. Complete specifications, listings and descriptions of accessories for all tools are included. Action photos and drawings supplement the text. For a copy of the catalog, write Rockwell Manufacturing Company, Delta Power Tool Division, 497 N. Lexington Ave., Pittsburgh 8, Pa.



## NOW! ONE PRODUCT DOES THE WORK OF TEN!



### Gothic All-Purpose Powder Tempera Answers Your Arts And Crafts Needs At Remarkably Low Cost

No longer do you have to buy a special paint for each different project. With just one basic color material, Gothic All-Purpose Powder Tempera, you can do: Poster Painting, Finger Painting, Block Printing, Textile Painting, Oil Painting, Spatter Cast, Gesso, Clay Decorating, Woodenware Decorating, and Glass Decorating. You and your students will be delighted with the results, thanks to the richer tones of

Gothic All-Purpose Powder Tempera.

The 14 colors come in 16-ounce canisters which are easily stacked and stored. List Price: 85¢ per canister. Made by Sargent, color specialists for schools and artists for 37 years. Why not try Gothic All-Purpose Powder Tempera in your classroom. In the last three years, 2½ million canisters have been used in American schools. Order from your school-supply distributor.

*Sargent*

FREE

illustrated booklet

American Artists' Color Works, Inc., 200 Fifth Ave., N. Y. 10, N. Y.  
Clear and precise instructions on how to use Gothic All-Purpose Powder Tempera. Mail this coupon today for your free copy.

Name.....  
School.....  
Address.....  
City.....Zone.....State.....

### DO IT YOURSELF

**Mosaics**  
Imported ceramic or glass tiles make beautiful mosaic designs.

150 colors to choose from in ceramic glass and porcelain Italian tiles. Our illustrated catalog suggests creative art activities. School discounts on bulk orders.

FREE

SEND FOR ILLUSTRATED IDEA CATALOG

### FOR ENAMELISTS!



Kiln and Hundreds of Projects in our ENAMEL-on-COPPER IDEA BOOK

- New Ideas for Copper and Complete Jewelry Findings for Ceramists.
- Many new Classroom Activities.

FREE!

Your Idea Book and Kiln Information will be rushed to you.

The Copper Shop Division

**IMMERMAN & SONS**

Dept. MC-27 • 1924 Euclid Ave. • Cleveland 15, Ohio

**O-P Craft**

Basic Crafts for Design-Decoration.

Write for Catalog

SANDUSKY, OHIO

74 O-P CRAFT CO. 2-C



JAR ACTUAL SIZE

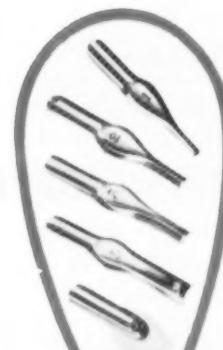
**CASEIN**

ANOTHER TALENS' FIRST!

Inexpensive quality casein, protectively packaged with air-tight plastic cap to prevent drying. Superlative medium for posters, decorative and scenic displays, sign painting, staining unfinished frames—wherever casein painting is indicated. 32 brilliant, permanent, waterproof colors.

Write for color chart and folder. 2 oz. jar: 50c

TALENS & SON, INC., UNION, N. J.



GOOD TOOLS FOR BLOCK PRINTING

**"SPEEDBALL"**

Linoleum Cutters, Water Soluble and Oil Inks

- Low cost, excellent quality
- Hand ground steel cutters
- Powerful chuck

Write for FREE lesson plans. Ask your school supply house for Speedball products.

SPONSORS OF NATIONAL SCHOLASTIC AWARDS

C. HOWARD HUNT PEN CO., CAMDEN 1, N. J.



COURTESY ROOM OF CONTEMPORARY ART, ALBRIGHT ART GALLERY, BUFFALO

*Sun and Rocks, by Charles Burchfield. Water color.*

Evarts Erickson

## CHARLES BURCHFIELD, ROMANTIC REALIST

In a room in a New York tenement in November 1912, a homesick Ohio youth wrote in his private journal: "This seems a crisis in my life. Without money, discouraged, I look myself over. I lack the courage to do the hard work. I dream dreams and possibilities, I see the mountain tops but I haven't the character to climb . . . Failure looms."\* The writer was Charles Burchfield and he had come to New York a few months earlier on a scholarship to the National Academy of Design. After one day in the Life Class, however, he had decided that art schools were no longer for him. Besides, human beings did not interest him. What moved him was nature, the passage of seasons, the clatter of crows' wings in a dark wood. He was a psychological "loner." He was also—although it may not have been evident at the time—one of the most original talents this country has produced.

In New York, Burchfield had sold his first painting for twenty-five dollars, and arranged to have some others exhibited. In November, unable to find employment, he wrote home for money, and took the train ride back to Ohio. Although he afterwards moved away from Ohio, he never—in the spiritual sense of the word—left home again. The external facts make Burchfield's life seem placid, but his inner life has always been intense. Burchfield grew up in the small Ohio town of Salem. Terribly shy, he had no close friends throughout most of his boyhood and adolescence. In recompense, he haunted the woods and fields around Salem and even thought of becoming another Thoreau or Burroughs. His own reaction to nature was passionate and complicated. Sometimes certain sights and sounds could oppress and even terrify him. He daydreamed a lot and one of his recurrent dreams was about a place he has always called





*June Radiance, a water color by Charles Burchfield.*

"North." At first it was a figment of his childish imagination. Later it came to symbolize the sense of the elemental that he hoped to achieve in his art.

After high school, Burchfield worked his way through the Cleveland School of Art. Then came the episode in New York City that so discouraged him. Back in Salem, Burchfield supported himself as a factory-clerk for a few years, then landed a job designing wallpaper in Buffalo, New York. In 1929, he quit his designing job to devote himself entirely to painting. Before 1929, Burchfield painted in his spare time. His work was often heavily romantic, moody and whimsical. Although he was still reaching for a distinctive style, his water colors (oils have never attracted him) were generally flat and decorative.

Sometimes he would paint with an almost Walt Disney-ish sense of fantasy, ascribing human characteristics to non-human objects. Such titles as "A Rogues' Gallery of Sunflowers" are self-descriptive; in "Ghost Plants," two rows of cornstalks and a sunflower seem to dance a Virginia Reel; in "The Mysterious Bird," an eerie winged creature, almost more bat than bird, flits over a desolate winter land-

scape. Sometimes the artist, by a kind of shorthand calligraphy, attempts to suggest the music of crickets on a summer lawn; or even strikes a morbid note, as in "The Garden of Memories," which portrays an aged, perhaps senile woman sitting beneath the leering windows of a house, in a garden of monstrous plants illuminated by a ghastly autumn moon.

In 1929, Burchfield moved to a suburb of Buffalo. A married man, with four children and another on the way, perhaps his view of life had changed a little. At any rate, he now began to paint cityscapes and the drab peripheries of a typical American industrial city. Perfecting his painting techniques, "climbing the mountain tops," he made his water colors fully the equal of oils in their expressive force and power. His realism was not that of the camera, for he distorted objects unconsciously, painting what he felt rather than what he saw, so that his subjects mirrored his own gloomy and rather morbid introspection. Yet the act of creation was such torture that he often became despondent for months at a time, doubting that he would ever paint again. Although his place in American art was now secure, he had trouble making ends meet. "What I love most," he wrote in his journal, "not only holds little of interest for most people, but in many of its phases is downright disagreeable, and not even to be mentioned! I love the approach of winter, the retreat of winter, the change from snow to rain and vice versa; the decay of vegetation and the resurgence of plant life in the spring. These to me are exciting and beautiful, an endless panorama of drama and beauty, but . . . the mass of humanity remains either bored or indifferent or actually hostile. And so I sit here among my pictures, neglected, like them, by the buying public. There seems no solution."<sup>\*</sup>

If Burchfield could not always please the public, he could please himself. In the mid-forties, he began to abandon his city-scenes for a return to the subject matter of his youth. One of the most powerful paintings of this latest period is "Sun and Rocks." The scene is Burchfield's mystical "North" in primeval times. It is the sap-running month of March, when even the rocks seem to hunch upwards towards "our great life-giving day-star—the sun." In this elemental, mythlike landscape Burchfield unites all the great technical gifts so painfully acquired throughout his more realistic middle-period, to the superb romanticism of his youth.

<sup>\*</sup>Quoted from Charles Burchfield by John I. H. Bauer, published for the Whitney Museum of American Art by the Macmillan Co., N.Y., 1956.

Evarts Erickson substituting for Hale Woodruff studied art at Columbia University and also at the University of Paris.

# understanding art

# 8



## BOOKS FOR ART TEACHING IDEAS AND METHODS

**COLLAGE AND CONSTRUCTION** in Elementary and Junior High Schools by Lois Lord, Chairman, Art Department, The New Lincoln School, New York City. A source of fresh and exciting art activities for teachers to use in helping children express their imaginative ideas. Offers material in four subject areas: Wire Sculpture, Constructions—including mobiles and stabiles, Collage, and Suggestions for Teachers. Emphasis is on simplicity and classroom workability. Many examples of children's work. 112 pages, Size 7 1/2 x 10, Fully illustrated

Circle 1 in coupon Price \$5.95

**PAPER SHAPES AND SCULPTURE** for school use by M. Grace Johnston, Asst. Supervisor of Elementary Art, Newark, New Jersey. A book of methods, materials and techniques for using paper as a creative art medium in elementary and junior high schools. Especially helpful to classroom and art teachers—grade five through junior high. Helps children quickly learn to use paper with skill and originality. Large photos illustrate finished pieces; drawings and text show processes. 70 pages, Size 8 1/2 x 11, Fully illustrated

Circle 2 in coupon Price \$4.75

**EXPLORING PAPIER-MÂCHÉ** by Victoria Bedford Betts, formerly, Art Consultant, Binney & Smith Co., New York City. A here's-how book giving ideas and methods for making varied, useful, and exciting things from papier-mâché. Many large photographs (four in full color) and original drawings show finished pieces, processes and techniques. Emphasis is on simplicity and classroom usefulness. Dozens of fresh new forms and designs to stimulate originality. 15 chapters, Size 7 1/4 x 10 1/2, Fully illustrated

Circle 3 in coupon Price \$6.00

**MURALS FOR SCHOOLS** by Arne W. Randall, Head, Applied Arts Dept., Texas Tech., Lubbock, Texas. A here's-how book for making murals in the classroom. This book of ideas, methods and uses of materials in mural making will be particularly helpful to the classroom and art teacher. It gives suggestions for mural themes; ideas on design, color and arrangement; use of basic media; ideas on planning murals; hints on care and storage of materials. 112 pages, Size 7 1/2 x 10 1/2, Fully illustrated

Circle 4 in coupon Price \$5.95

**CREATIVE EXPRESSION WITH CRAYONS** by Elsie Reid Boylston, formerly, Supervisor of Elementary Art, Atlanta, Georgia. Have you ever wished you had at your finger tips a source of ideas using crayons—new—stimulating—interesting ideas for your classes? This book emphasizes creative art and suggests ways to develop creative leadership. It also gives, with many illustrations and readable text, a wide range of interesting and useful methods of using crayons. 100 pages, Size 7 x 10, Fully illustrated

Circle 7 in coupon Price \$3.95

**MASK MAKING, Creative Methods and Techniques** by Matthew Baranski, Art Teacher, Buffalo, New York Public Schools. A book for teachers, giving ideas for designing and making masks for all occasions. With many illustrations and readable text, it shows you how to make masks everyone enjoys... the kind with real personalities. Only a few simple tools and inexpensive materials are needed. Ideas for all ages, grade through high. Many sketches and photos. 112 pages, Size 7 1/2 x 10 1/2, Fully illustrated

Circle 5 in coupon Price \$5.50

**PAPER SCULPTURE** by M. Grace Johnston, Asst. Supervisor of Elementary Art, Newark, New Jersey. Have you tried the fascinating experience of taking a flat sheet of paper and making three-dimensional designs—modern designs that sparkle with originality? You'll find a rich store of ideas in this book. It also gives methods and techniques for cutting, bending, scoring, folding, fastening, and assembling. A stimulating and helpful book. 52 pages, Size 8 1/2 x 11, Fully illustrated

Circle 6 in coupon Price \$3.75

**PLANNING AND PRODUCING POSTERS** by John deLemos, Art Director, The Latham Foundation, Palo Alto, California. Seventh Printing—1958. School dances, games, contests, shows are a few events that need posters to help promote and enliven the occasion. This book will be an inspiring help to your pupils in creating the right poster for important events. A practical, fully illustrated, stimulating book on media and techniques for making school posters. 60 pages, Size 7 1/2 x 10 1/2, Fully illustrated

Circle 8 in coupon Price \$3.75

**MAIL THIS COUPON TODAY!**

We'll gladly send any of these books  
Order copies today.

DAVIS PUBLICATIONS, INC.  
191 Printers Bldg., Worcester 8, Massachusetts

Please send book(s) I have circled: 1 2 3 4 5 6 7 8

☐ My payment is enclosed.

☐ Send bill payable in 30 days.

Name \_\_\_\_\_ PLEASE PRINT

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

## TOOLS and SUPPLIES



that will help you in  
Teaching Arts and Crafts

Our illustrated Catalog describes  
and prices all the necessary tools  
and supplies you'll need. For  
schools—homes—shop crafts—art  
courses. Looms, weaving materials  
and instruction aids are also listed.  
You can enjoy making hundreds  
of useful, attractive articles in  
wood, metal, leather, pottery,  
reed, etc.

J. L. HAMMETT CO.  
264 Main St., Cambridge, Mass.

SEND FOR YOUR FREE CATALOG NOW

TAKE IT FROM ME!  
MAKE SURE YOU USE



LIQUID TEMPERA COLORS

NON-POISONOUS COLORS FOR USE  
IN SCHOOLS. Write for Circular.



IDDINGS PAINT CO., INC.

WATER PAINT SPECIALISTS  
LONG ISLAND CITY 1, NEW YORK  
LOS ANGELES 23, CALIFORNIA

## CURIOSA FOR CRAFTS AND JEWELRY MAKING

thunder eggs \* glyptic gems \* glass eyes \* fetish beads \* black  
sapphires \* lapidary rough \* shark's teeth \* scarabs and aleppo  
stones \* baroque pearls \* giant porcupine quills \* ivory skulls  
\* nautch dancer's bells \* coral branches \* ebony \* coco-bolo \*  
lignum vitae \* elephant ivory \* buffalo horn \* precious nacre \*  
lapis lazuli \* chrysocolla \* tourmalines \* hundreds of stones  
and exotic things \* all orders filled and shipped immediately



findings \* tools \* supplies  
all at amazingly low prices

Send 25¢ for Fascinating Catalog

**sam kramer**

Dept. SA, 29 W. 8th Street, New York 11, N.Y.

## CERAMICS, MOSAIC, COPPER ENAMELING

YOUR COMPLETE SOURCE  
OF MATERIALS & EQUIPMENT

New large discounts to schools

NEW fully illustrated 1958

INSTRUCTIVE CATALOG

FREE if requested on school letterhead  
(OTHERS 25¢)

TEPPING STUDIO SUPPLY CO.

PROFESSIONAL STAFF

3517C RIVERSIDE DRIVE, DAYTON 9, OHIO

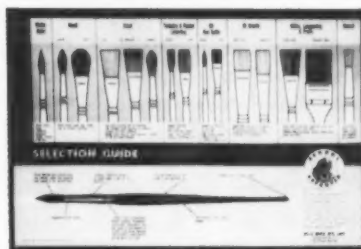
## CUT-OUT LETTERS OF DURABLE COLORED CARDBOARD

\$1 per set. 2" capitals, 180 letters and numbers  
per set; 1 1/2" manuscript, 240 letters per set. Red,  
black, white, green, yellow and blue. Only one  
color and size per set. Reusable adhesive \$1/pack.  
Order by mail or write for free samples. C.O.D.  
is o.k. Satisfaction guaranteed.

MUTUAL AIDS, Dept. 44, 1946 Hillhurst, Los Angeles 27, Calif.

## ITEMS OF INTEREST *Continued*

**New Catalog of Enamels** Offered at  
no cost to School Arts' readers is the new  
catalog of Thomas C. Thompson Company,  
for 65 years a leading manufacturer of  
quality enamels. Their line now includes  
over 150 shades of enamel colors in lump  
and powder, plus opalescent, crackle,  
glaze paint, separation enamel, threads and  
liquid gold. In addition, this new catalog  
includes enameling kilns, findings, chains,  
trivets, frames, wire, and tools and equip-  
ment for light craft work and spraying. A  
feature in the enamels section is the line of  
new ice colors for use in decorating the sur-  
faces of glass objects and to decorate flat  
glass that is "sagged" into a clay mold  
when fired in a kiln; also intended as  
"sandwich" color in laminated bent glass  
decoration. For your copy of this helpful  
reference and buying guide of enamels,  
please write to Thomas C. Thompson Com-  
pany, Highland Park, Illinois and ask for  
Catalog No. 587.



**Brushes** Shown here is a helpful chart,  
developed by Delta Brush Mfg. Corp. to  
aid in the selection of brushes for your  
classes. Called "Selection Guide of School  
Art Brushes" and measuring 25 by 11 1/2  
inches, the Guide illustrates the various  
types and shapes of school art brushes  
(Water Color, Easel, Tempera and Poster  
Lettering, etc.), describes their uses and  
lists the most popular school brush numbers.  
It also tells the types of hair, special features  
found in each brush, the sizes in which they  
are available and the school grades for  
which they are recommended. The chart is  
available to art supervisors and art teachers.  
Write for your copy to Delta Brush Mfg.  
Corp., 120 South Columbus Ave., Mt.  
Vernon, N. Y., on school stationery and  
enclose 15 cents to cover cost of mailing.

**Colored Inks** A swatch folder offered at  
no cost by Higgins Ink Company, 271  
Ninth St., Brooklyn 15, N. Y., highlights  
their line of colored inks. They consist of  
eight spectrum hues based on the Ostwald  
System of four primaries and four secondaries  
arranged in balanced spectral series. Only  
two intermediate hues are illustrated but  
by mixing adjacent hues intermediates  
may be prepared. These inks may be used  
for line, wash and air brush and you can  
dilute with water to obtain varying effects.  
For your free copy of this helpful folder,  
please write Higgins Ink Company and ask  
for information on waterproof, colored inks.

## SCHOOLINE KILNS by Harrop

- All-New Designs
- For Class-Room and  
Laboratory
- Controlled Firing
- Underwriters' Approved



**New Underwriters' Approved kilns incor-  
porate all features proven  
most useful in school  
and laboratory work.  
Each of 3 heating circuits  
(for low, medium, high  
speeds) gives fully even  
heat distribution and  
close temperature con-  
trol . . . MR series for Cone 04 (2000° F.),  
MRH series for Cone 8 (2300° F.). Clean design  
with no protruding switches or other equip-  
ment . . . outside dimensions in table below  
are maximum clearances needed. Full yoke  
door cannot sag or bend out of alignment.**

**Automatic temperature controlling system  
available. Eliminates all manual control . . .  
completely safe to start firing at end of day  
with no further attention, no worry about  
over-firing. Automatic control also makes it  
easy to reproduce same firing treatment time  
after time . . . assures consistently high quality  
ware.**

	MR-14C MRH-14C	MR-18C MRH-18C
Firing Chamber		
Width	14	18
Depth	14	18
Height	13	19
Cu. Ft.	1.7	3.5
Outside Dimensions		
Width	31 1/2	38
Depth	28 1/2	34
Height	59 1/2	65 1/2

**Write for complete information on all Har-  
rop "Schooline" kilns . . . Top-Loading and  
Side-Loading models, bench or floor, metallic  
or non-metallic resistors. Also available are  
Harrop glazes, under-glazes, clays, plaster, kiln  
furniture and supplies.**

## Harrop Electric Furnace Division

OF HARROP CERAMIC SERVICE CO.

Dept. 5, 3470 E. Fifth Ave., Columbus 19, Ohio

## B & I POTTERY MAKER POWER-DRIVEN, VARIABLE SPEED



Only  
**\$57.50**  
less  
motor &  
belt  
f. o. b.

Professional features, never before available at such  
a popular price! Versatile enough for advanced  
craftsmen, yet simple enough for beginners' use.  
Precision built, compact, portable. Mounts any-  
where. New variable speed reducer with adjustable  
foot controls provides speed range from 38 to 130  
r.p.m. Built-in water container, attached wedging  
wire, reversible 9-inch throwing head with recess  
for molding plaster bats. Ideal for school or home  
studios. Order by mail now . . . or write for com-  
plete literature.

B & I MANUFACTURING CO., Dept. SA, Burlington, Wis.





# New Book

## Art Workshop Leaders Planning Guide

**Edited by Dr. Howard Conant**

Chairman, Department of Art Education,  
New York University

This book is a guide for art teachers and community group leaders concerned with organizing and conducting creative art workshops. It is based on recent studies conducted in a series of art workshop seminars at New York University.

The brief, clearly stated text gives you the conclusions and recommendations of thirty-seven highly qualified art educators, representing a cross section of the country and all educational levels, who devoted many days and seminar sessions to the subject of creative art workshops. You see in this book the net result of their experience and discussions summarized for you by Dr. Howard Conant, leader of the seminars. In addition to the text there are many action photographs of workshops, art classes and examples of children's work which amplify and give visual meaning to the written material.

This list of section headings gives you an idea of the wealth of practical and helpful information this book offers you:

- |  |  |
|--|--|
| The Workshop Concept in Art Education  | Art Materials Manufacturers and Distributors |
| The Nature of Creative Teaching in Art | Audio-visual Aids for Art Workshops          |
| Art Workshop Planning                  | Films on Art Education                       |
| Art Workshop Financing                 | Evaluation and Follow-up of                  |
| Art Workshop Scheduling                | Art Workshop Experiences                     |
| Art Workshop Publicity and Recruitment | In-service and College Credit for            |
| Art Workshop Leadership                | Art Workshop Participation                   |
| Art Workshop Participants              | Bibliography of Recommended Books            |
| Art Workshop Activities                | and Magazines                                |
| Art Workshop Materials                 |  |

If you are planning workshops for teachers, community group leaders or others concerned with creative art activities for youngsters, you'll find much helpful material in this book.

44 pages, size 8½ x 11, illustrated

**Price \$2.60 postpaid**

Use the coupon to order your copy

**MAIL THIS COUPON TODAY!**

### DAVIS PUBLICATIONS

191 Printers Building, Worcester 8, Mass.

Please send.....copies of ART WORKSHOP LEADERS PLANNING GUIDE  
at \$2.60 each, postpaid.

☐ Check for \$.....enclosed. ☐ Send bill payable in 30 days.

Ship to: Name.....

Street.....

City..... State.....

My School  
Address Is:.....

## LETTERS

**Listing Age Groups** Elizabeth Richards of Philadelphia, Pennsylvania, writes us: "You have a fine magazine. Have you considered indicating age groups when telling of new materials and techniques? Of course, one can guess probable age of children but I think it might be helpful if you gave the grade or age. Keep up the good work."

We hope our potential authors are listening because we always like to include the ages and grades when this information is given. Even when we do this, however, we would not like to think that teachers in other grades would consider an activity inappropriate because the grade is not the same. Most of the art activities can be used at almost any age level if the teacher takes into account the particular children she teaches. Even these vary from grade to grade and town to town, and may vary according to previous art experiences of the children involved.

**Non-Teaching Duties** A Pennsylvania high school art teacher writes as follows: "Are the following art activities a part of the art teacher's teaching load, or should they be classified as extra duties? (1) Supervising correlation activities beyond regularly assigned classes. (2) Supervising the painting of football banners, dance posters, and so on. (3) Doing the art work for school programs to be printed. (4) Doing covers for budget books. (5) Painting signs for school activities, P.T.A., and so on."

"Should art teachers be expected to sponsor art exhibits for the general public? If so, since this work is done outside of class should it be considered a part of the teaching load? Our school is evaluating teacher load and I am placed in a defensive position. It appears that art teachers are expected to have their classes interrupted. Business teachers are not expected to audit the school books. English teachers are not expected to write letters for the front office."

Unfortunately, too many administrators look upon art as something rather informal and indefinite, and believe that the activities can be very flexible without much damage to the program. We art teachers have helped the cause along by our resistance to fixed outlines and courses of study, and we would not want to have an inflexible program. My own experience on various levels, including high school, would indicate that a great many administrators and fellow teachers are more likely to evaluate the success of the art program and the capabilities of the art teacher by what is done in addition to the classroom work. Music teachers get much of their reputations from what their students do in assembly and in public meetings, where they can be seen and heard by others. By all means, cooperate and continue to do the outside work as this is good public relations. Where this work cannot be done in class, it should definitely be considered a part of the art teacher's load with some free time allowance for duties of this nature.

Dr. Julia Schwartz is associate professor, Arts Education Department, Florida State University, Tallahassee, Florida.

# beginning teacher

**Perspective** "When you come into my third grade, the first thing I want you to do is PERSPECTIVE! This is one thing I've never learned and I want them to learn," was the request made by a classroom teacher of an art educator just appointed to a newly created art teaching position in an elementary school. Perspective drawing seems to loom large in the minds of many classroom teachers when they think of the teaching of art. In fact, some classroom teachers have the mistaken notion that perspective drawing and art are synonymous. Recently the writer found that eighteen out of twenty prospective classroom teachers enrolled in an art education class listed "perspective" as one of the three major problems encountered in their initial picture making efforts. They listed the problem as: "My main problem was lack of perspective," "I am unable to put objects in perspective," and "I do not know how to obtain proper perspective."

The classroom teacher's request as well as the problems listed as serious by the prospective classroom teachers reflect inadequate background of experience in, and lack of, understanding of picture making as an art form. Apparent is an inability on their part to react with sensitivity to the visually expressive individual design quality inherent in an art work. In view of this situation, how does the art teacher proceed with the third graders in terms of their teacher's request that they be taught perspective? The art teacher will have to help the teacher of the eight-year-olds to learn that (1) the mental images of this age child are different from those of an adult and (2), since differentiated visualization and realization of space in pictorial art expression is characteristic of a more mature stage of human development, not too many of her children will even be ready for work in the theory of linear and aerial perspective. Furthermore, as she

works with the children she must help the teacher to note that the child's mental image is often not clearly formed until the drawing or painting is started and that the image develops as the child works. It is precisely at such a point that unique values of the visual arts in the elementary school program may be realized. By encouraging the child (3) to observe what he is doing, (4) to talk to the teacher about what he has in mind and (5), as he encounters technical difficulties such as "making the people around the table look as if they were sitting up in place of lying down," to use his eyes to "see" more clearly that which he is trying to express.

The teacher does not arbitrarily impose her own way of "seeing" upon the child as he works in art. If she does, she risks confusing and discouraging him and undermining any self-confidence which he may thus far have developed. The writer recalls with vividness one six-year-old saying despairingly to her mother upon coming home from school, "Mama, Miss Warner won't let me hang the sky above any more. Today she made us bring it down to the ground. Isn't my picture a mess now?" Suffice it to say that the teacher is most effective in art education when she helps the child to help himself in finding methods to express his ideas. This does not exclude showing the child examples of varied ways in which others have solved similar space problems. It may involve explaining the way a thing is constructed, a discussion of how it operates, and even pointing out possible alternate changes in the child's picture design so as to incorporate in it his newly discovered meanings and insights. It behooves teacher educators to work in similar fashion with those prospective teachers now in their classes. For it is upon how these college students are led to "see," for example, the space aspect of picture making that will enable them later to more intelligently utilize art teachers put at their disposal.

*Most of the prospective teachers enrolled in an art education class listed perspective as one of the three major problems encountered in their initial picture-making efforts. Here are two of them. (Left) "Everything I draw seems to look flat and not real." (Right) "I started an aerial view, but when I finished one side of the street I couldn't put in the other."*



## NEW! for 1959

# Bennett Books for the Arts and Crafts teachers



## GENERAL CRAFTS

By George A. Willoughby

Now! A general crafts text written especially for junior high, designed and written to introduce the student to a wide variety of crafts.

Initial chapters awaken and stimulate the student's interest in basic crafts. Subsequent chapters develop his interests in specific craft subjects. Nine popular crafts are explored and applied. Planning, designing, production and completion of projects are discussed to further aid the teacher in developing student capabilities. Leatherwork, plastics, wood, art metal, modeling, graphic arts and other crafts are included. Numerous photographs and drawings aid and supplement text material. 176 pages. \$3.80



## ART IN EDUCATION

By Conant and Randall

Every detail of a good art program is examined and the most effective methods of presenting such a program are thoroughly discussed. The administrator, supervisor, instructor, and advisor will find a message addressed to his or her field. The importance of the educator's endeavor is stressed throughout. Illustrations are up-to-the-minute and chosen to clearly demonstrate the text. No art library or educator's personal library is complete without this comprehensive text. 384 pages. Prepublication price, \$6.00.

## GRAPHIC ARTS

Darvey E. Carlsen

A brand-new, well-illustrated text, that clearly, simply introduces the beginning student to each activity in the fascinating graphic arts industry!

Activities in each section are outlined in easy-to-follow sequence and numerous photographs illustrate step-by-step operations. 160 pages. \$3.60

## ART FOR YOUNG AMERICA

Nicholas et al

The ideal art appreciation textbook on the real qualities of art for the junior high student. 302 pages. \$3.52

EARLY ADOLESCENT ART EDUCATION (1957)  
by Carl Reed . . . . . \$4.80

CHILDREN'S ART EDUCATION (1957) by Knudsen  
and Christensen . . . . . \$4.80

PAPER FIGURES (1957) by Pauli and Mitzit . . . . . \$2.00

PAPER SCULPTURE AND CONSTRUCTION (1957)  
by Josephine Miller . . . . . \$1.50

LEATHERCRAFT (1958) by Chris Groneman . . . . . \$3.68

Order these Bennett books, billed on 30-day approval, directly from . . .

**CHAS. A. BENNETT CO., INC.**  
1649 Duroc Bldg. Peoria, Illinois

Satisfaction guaranteed!

## Ideas and Methods for Creative Teaching

### BOOKS

Art Workshop Leaders Planning Guide, Conant . . . . . \$2.60

Collage and Construction in Elementary and Junior  
High Schools, Lord . . . . . 5.95

Creative Expression with Crayons, Boylston . . . . . 3.95

Exploring Papier Mâché, Betts . . . . . 6.00

Guatemala Art Crafts, deLemos, Cloth Binding . . . . . 5.75  
Paper Binding . . . . . 3.50

Mask Making, Creative Methods and Techniques,  
Baranski . . . . . 5.50

Murals for Schools, Randall . . . . . 5.95

Paper Shapes and Sculpture for school use, Johnston . . . . . 4.75

Paper Sculpture, Johnston . . . . . 3.75

Planning and Producing Posters, deLemos . . . . . 3.75

Weaving, Pottery and Puppetry, deLemos . . . . . 4.75

### PORTFOLIO

Art Metal Crafts, deLemos . . . . . 2.50

Order from the following sources,  
or Davis Publications, Inc.  
Printers Building  
Worcester 8, Massachusetts

### ALABAMA:

Standard School Service, 3827 First Ave. N., Birmingham 6

### CALIFORNIA:

Sather Gate Book Shop, 2335 Telegraph Avenue, Berkeley 4  
A. C. Vroman, Inc., 383 So. Pasadena Avenue, Pasadena

### COLORADO:

American School Supply Co., 1514 Arapahoe St., Denver 2

### ILLINOIS:

Beckley-Cardy Co., 1900 N. Narragansett, Chicago 29  
A. C. McClurg & Co., 333 East Ontario Street, Chicago

### LOUISIANA:

F. F. Hansell Bros., 131 Carondelet Street, New Orleans 12  
Jenkins Book Co., 740 St. Charles Avenue, New Orleans 12

### MASSACHUSETTS:

Campbell and Hall, Inc., 989 Commonwealth Ave., Boston 17  
J. L. Hammett Co., Kendall Square, Cambridge 42  
H. R. Hunting Co., 29 Worthington Street, Springfield

### MINNESOTA:

St. Paul Book and Stationery Co., 55 East Sixth St., St. Paul 1

### MISSOURI:

Hoover Bros., Inc., 1020 Oak Street, Kansas City 6

### NEW JERSEY:

Baker and Taylor Co., Route 22, Hillside  
J. L. Hammett Co., 2393 Vaux Hall Road, Union

### NEW YORK:

Acme Code Company, 507 West 33rd Street, New York 1  
American News Co., 131 Varick Street, New York 13  
American Seating Co., 935 West Genesee Street, Syracuse 4  
J. L. Hammett Co., 89 Broad Street, Lyons  
Peckham Little Co., 232 West 18th Street, New York

### NORTH DAKOTA:

Northern School Supply Co., Fargo

### OKLAHOMA:

Dowling, Inc., 2nd and Broadway, Oklahoma City  
Oklahoma Seating Co., 19 W. Main Street, Oklahoma City 2

### OREGON:

J. K. Gill Co., 408 S.W. Fifth Avenue, Portland 4

### PENNSYLVANIA:

William M. Bains, 1808 Ransstead Street, Philadelphia 3  
Garrett-Buchanan Co., 12 South 6th Street, Philadelphia 6

### TENNESSEE:

Tennessee Book Company, 126 Third Ave. N., Nashville 3

### TEXAS:

Hoover Bros., Inc., 1305 North 14th Street, Temple  
The Methodist Publishing House, 1910 Main Street, Dallas 1  
Practical Drawing Co., 2205 So. Lamar Street, Dallas 2

### WASHINGTON:

John W. Graham & Co., 707-711 Sprague Avenue, Spokane 6

### CANADA (prices slightly higher):

Mayer School Supplies Ltd., Moncton, Montreal, Toronto,  
Winnipeg, Saskatoon, and Edmonton

## ART FILMS

Films on drawing that are not "how to do it" or dull expositions of perspective are rare. Drawing is an exciting experience in art, one often overlooked today because we feel that it is a nonexpressional form of art. As we see the flashing sureness of the artist's hand as he draws a figure, we soon see that much has been overlooked in drawing as a basic creative element.

Tom McClure in a short (22 min.) black and white sound film called "Exploring Art Systems" by Portafilms, Orchard Lake, Michigan, takes the human figure as his subject and draws it in a linear form in which action and position of the figure are the designed ends. This human form develops and changes in the making of other drawings to show how space, form and pattern are developed. In one drawing Mr. McClure mentions that the space he is leaving gives a transparent and open structure like one sees in metallic structures. Without these clues it would still be quite easy to see that Mr. McClure is a sculptor. His drawing has an unusually solid quality that, although not attempting to imitate three-dimensional form, gives the quality of sculpture.

As can be seen or heard at any art conference today "drawing" is a term that is open to the widest accommodation. Here Mr. McClure gives us his highly personal but also most illuminating version of exploring art systems through drawing. I feel this film will help students understand drawing as an art form and possibly open their eyes to a new way of seeing and presenting their vision. Mr. McClure presents as he draws a fine commentary on what he is doing and an explanation of his purpose in art. This is done with that sure lucidity that is sometimes but not often done by the artist. I could think of no better way of narrating this film.

Thomas Larkin, who reviews art films for our readers, is assistant professor in art and art education, University of Michigan. Address: 143 College of Architecture and Design, University of Michigan, Ann Arbor.



## Edmund B. Feldman

Dr. Edmund B. Feldman is coordinator for the art education program at Carnegie Institute of Technology, Pittsburgh.

The Board of Education of New York City has published a curriculum bulletin, really a book, called **Art: Seven, Eight, Nine, Ten**. It consists of the courses of study for these grades with very complete descriptions of suggested art practices, recommended apportionment of time, and a brief introductory essay on method and philosophy. This guide has the breadth one expects in the Junior High School and its eminently practical approach makes it a very useful tool. One little quibble: the full color photographs on the cover and inside the book have the kind of intensity that sets my teeth on edge and don't reflect the sort of taste which art education should try to develop. However, the rest of the book is very handsome and offers really excellent ideas for introducing and developing art lessons (if "lesson" doesn't sound too "old hat"). You can get the art guide for \$1.50 by writing: The Division of Supplies and Syllabi, Board of Education, 110 Livingston Street, Brooklyn 1, New York, Room 108.

**The Shape of Content** by Ben Shahn (published by Harvard University Press, Cambridge, 1957), Price \$4.00, embodies Mr. Shahn's Charles Eliot Norton Lectures at Harvard, a most unusual publishing event since Mr. Shahn is the first practicing artist to hold the Norton Professorship at Harvard. Ben Shahn's graphic work is known to most of us but few realize that he is a very literate and witty person whose insights about the arts and education rarely miss the mark. He addresses the artist and the person who would understand art truly; he advises the artist not to be parochial in his interests nor in his professional education; he is somewhat suspicious of artists in the university and he recognizes the sort of threat which a certain kind of art historical scholarship poses to the successful functioning of the artist in an academic atmosphere. He states eloquently how art creates the images we use to order our environment, and how, in fact, art creates whatever sense of community we have. This is an important book, and worth owning.

**Printing for Pleasure** by John Ryder (published by Charles T. Branford Company, Boston, 1955), Price \$2.75, is a delightful little volume which tells the interested amateur how he can acquire a good, small press, type fonts (choosing a face you can live with), and use them to experiment and to turn out truly distinguished printing for his own needs. For the person who has a feeling for type and would like to know more about printing technology and how to put it to his own use, this is an excellent aid.

## new teaching aids

**Painting the Figure in Watercolor**, \$10.00, by Herb Olsen (published by Reinhold Corporation, New York, 1958) presents the work and instruction of an artist who has made a specialty of painting the female nude in watercolor, usually out of doors. There is no questioning Olsen's skill as a draughtsman and his consummate control of watercolor washes. His approach to the figure is mainly anecdotal; he prefers to draw attention to his control and the wetness of his paint. This is a case of technical proficiency inhibiting the growth of the artist as a person of insight and expressive power. At his best, Olsen can evoke a poetic mood in nature with remarkable simplicity, ease, and of course, considerable knowledge of his medium. The book is beautifully produced and the illustrations are a real pleasure.

In **Art for Everyone**, by Hal Cooper (published by Watson-Guptill, New York, 1957), Price \$4.95, we have another potboiler which presents "basic" drawing, cartooning, lettering, design, perspective, etc. The information is not really bad, but the illustrative material is so uninspiring, and in an art book, this is what matters. This is where standards are set for the uninitiated. The author directs his book to the so-called untalented who seek a hobby. At this level, they would be better advised to get some person-to-person instruction. It is more difficult for a human being to pass on the sort of information which the invention of printing makes very easy.

**Papier Mâché**, by Lillian Johnson (published by David McKay Company, Inc., New York, 1958), Price \$3.95, is an illustrated elementary handbook which will introduce the beginner to the rudiments of modeling in this medium. There are some examples of the author's work used in window displays and some general information about proportion and color. I regret to say that the work illustrated is not very exciting, the Santa Clauses and reindeer and clowns being almost devoid of originality in conception or presentation.

Dr. Feldman alternates with Dr. Ralph Beelke in reviewing books and other publications for School Arts readers. We are hoping that this feature can expand to include other "New Teaching Aids" that would not be classified as books or films. Curriculum guides have been included in the past. Perhaps we should refer to magazine articles worthy of special attention. If you have any suggestions please write to the reviewers. They will be very glad to hear from you.

Any book reviewed in School Arts may be ordered through the Creative Hands Bookshop, 191 Printers Building, Worcester 8, Massachusetts.

## BOSTON MUSEUM SCHOOL

A DEPARTMENT OF THE MUSEUM OF FINE ARTS

Est. 1876. Professional training with diploma course in Drawing, Graphic Arts, Painting, Sculpture, Jewelry, Silversmithing, Commercial Arts, Ceramics. 16 Traveling Scholarships. Unlimited contact with Museum collection. B.F.A. and B.S. in Ed. degrees granted by Tufts University. Catalog.

**EVENING SCHOOL** certificate course in Graphic Arts, Sculpture, Ceramics, Painting. Special courses in Calligraphy, Lettering, Interior Design and Water Color.

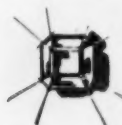
**RUSSELL T. SMITH, Head of School**  
230 The Fenway Boston, Mass.

## MOORE INSTITUTE OF ART

The Professional College for Career Women. 115th year. Internationally known artist-instructors. State accredited 4-year B.F.A. or B.S. degree courses. Advertising Art, Art Education, Fashion Design and Illustration, Interior and Textile Design, Painting and Illustration. Day and Saturday classes. New residence hall. Catalog.

1320 N. Broad St., Philadelphia 21, Pa.

## SAY YOU SAW IT IN SCHOOL ARTS



### Select Your Own PRECIOUS STONES

Inspiring collections sent on 30 day approval. Pay only for what you keep. Expertly cut and polished Amethyst, topaz, jade, etc. For rings, bracelets, pendants, earrings. **WRITE TODAY!** 50¢ and UP

**JOHN J. BARRY CO.** Dept. A, P. O. Box 15  
DETROIT 31, MICH.  
IMPORTERS OF PRECIOUS STONES



### What's Your Interest? ALL-CRAFTS "SUPER-MART" CATALOG-102 Big Pages!

Prompt service on every craft need. Leathercraft, Metalcrafts, Enameling, Mosaic Tile, Woodenware, Ceramics, Art Supplies, many others. Since 1910. Write for free catalog. Dept. SA-1.  
**SAX BROS., Inc.** 1111 N. 3rd St., Milwaukee 3, Wis.

### BIG ILLUSTRATED CATALOG FREE TO TEACHERS

● **LEATHERCRAFT**  
CATALOG. Make leather purses, belts, billfolds

● **METALCRAFT**  
CATALOG. Make aluminum, copper, foil pieces

**J.C. LARSON CO.** Dept. 8310, 890 S. Tripp Ave., Chicago, Ill.



"Palette Patter" keeps you posted on the latest and best in artist materials and equipment. Get your free monthly copy.

Write to—Dept. SA-1



## SAY YOU SAW IT IN SCHOOL ARTS

## ADVERTISERS

JANUARY 1959

American Artist's Color Works, Inc.	37
American Crayon Company	Cover 4
B & I Manufacturing Co.	41
John J. Barry Company	46
Chas. A. Bennett Co., Inc.	44
Binney & Smith, Inc.	Cover 2
Boston Museum School	46
Milton Bradley Company	Cover 3
Ceramicchrome Laboratories	36
Davis Publications, Inc.	40, 42, 46
Delkote, Inc.	34
Delta Brush Mfg. Corp.	38
B. F. Drakenfeld & Co., Inc.	34
Dwinnell Art & Craft Supply	36
J. L. Hammett Company	41
Harrop Ceramic Service Co.	41
O. Hommel Company	34
C. Howard Hunt Pen Company	38, 37
Iddings Paint Co., Inc.	41
Immerman & Sons	37
Studio of Sam Kramer	41
J. C. Larson Company	46
Lewis Artist Supply	46
Moore Institute of Art	46
Mutual Aids	41
O.P. Craft Co., Inc.	37
Sax Bros., Inc.	46
Talens & Son, Inc.	37
Tapping Studio Supply Co.	41
F. Weber Company	36
X-Acto, Inc.	36

**IF** you borrowed  
this copy of  
**SCHOOL  
ARTS**  
why not have your  
own subscription?

You'll have your personal copy ready to  
help you every month of the school year.  
Ten issues, \$6.00

### MAIL THIS COUPON TODAY!

**OR**—Add a subscription for School Arts  
to your next requisition for supplies.

**SCHOOL ARTS**  
191 Printers Building  
Worcester 8, Massachusetts

Please send me the next 10 issues of School Arts.

☐ Send Bill ☐ Enclosed is \$6.00

Name \_\_\_\_\_

PLEASE PRINT

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

## NEW BOOKS

### Ideas and Methods for Teachers



### Collage and Construction in Elementary and Junior High Schools

by Lois Lord, Chairman,  
Art Department, The New  
Lincoln School,  
New York City

A source of fresh and exciting art activities for  
teachers to use in helping children express their imagina-  
tive ideas.

You'll see and read how to present collage and  
construction in a creative way; how to challenge the  
imagination; how to use the classroom-tested procedures  
and methods to help make your art program more stim-  
ulating and meaningful.

#### SPECIAL FEATURES

- Offers material in four subject areas: Wire Sculpture, Constructions—including mobiles and stables, Collage and Suggestions for Teachers.
- Many suggestions for exciting class activities.
- For classroom and art teachers, grade-junior high.
- Emphasis is on simplicity and classroom workability.
- Fully illustrated with children's work.

112 pages size 7½ x 10 Price \$5.95 postpaid

Circle A in the coupon—Order copies today

### Paper Shapes and Sculpture for school use

by M. Grace Johnston,  
Assistant Supervisor of  
Elementary Art,  
Newark, N. J.

A book of methods,  
materials and techniques  
for using paper as a crea-  
tive art medium in ele-  
mentary and junior high  
schools.

Some imagination, a  
desire to experiment, a  
bit of practice and a few  
easily available tools are the basic ingredients for making  
original and useful things from paper.

#### SPECIAL FEATURES

- Especially helpful to classroom and art teachers—  
grade five through junior high.
- Helps children quickly learn to use paper with skill  
and originality.
- Large photos illustrate finished pieces; text and draw-  
ings show how they were made.

70 pages size 8½ x 11 Price \$4.75 postpaid

Circle B in the coupon—Order copies today

FROM YOUR DEALER OR DIRECT

### MAIL THIS COUPON TODAY

Davis Publications, Inc.  
191 Printers Building, Worcester 8, Mass.

Please send . . . copies of A and/or . . . copies of B

☐ Payment is enclosed ☐ Please send bill

Name \_\_\_\_\_  
Please print name and address

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

☐ Check here for a free folder describing art teaching  
books on Murals, Papier Mâché, Posters, Masks, Paper  
Sculpture, Crayons.

**Alice A. D. Baumgarner**

Address questions to Dr. Alice Baumgarner, State Director of Arts Education, State House, Concord, New Hampshire.

*How can I get more high school students into elective art courses? This is my first year in this position. The students I have seem to enjoy their art work. My problem is to increase enrollment. New York.*

You seem to be making progress in that your students enjoy working with your guidance in art media. You might look first at your program. What variety of experiences can you present? Is there real depth and challenge for the students in art? Is your art room equipped for work in ceramics, construction, graphics, metalwork, including jewelry, and weaving, as well as for drawing and painting? What is the school policy regarding art service projects? Is the art department a dumping ground for contests and heavy routine busywork? Are students stimulated to work in addition to class time? Are the personal and community needs considered? Are field trips to places of significant art interest a regular part of your program? What recognition is given students for their art expressions? Is art kept before the school through attractive displays of student work? Have you tried a students-at-work exhibition for students, faculty and parents? Do you involve the students in evaluation of their work as well as stimulating them to explore and experiment?

After this careful study of the home base, you might look out at the method and content of the art programs in the elementary and junior high schools. What attitude have the students caught in their earlier experiences with art? If you find that students dislike art, can you learn the reason for this feeling? Is it due to the manner in which art was interpreted to them or due perhaps to a teacher who had an unhappy outlook on life or a morbid disposition?

Next, you might consider the total roster of the school. What other subjects are scheduled during the same periods as art? Is art election available to students regardless of their track or course of study? For instance, are the required subjects of the business major arranged in such a way that he could elect an art course? Then, what is the attitude of the principal and the guidance counselors toward art? Do they believe that all people can benefit from art instruction, or is an art class a place to put the intellectually retarded and the mentally slow, or should only those with special aptitude be permitted to elect art? Is the budget adequate for art supplies, tools and equipment? Are funds available for rental or purchase of visual materials such as films, slides, exhibitions? Is the art room equipped for projection? In the community what is the status of art? Are there active groups of adults interested in instruction in painting and the

crafts? Might you work with this interest, perhaps teach a group or two?

Through your school budget or with the help of interested community groups, can you supply your students with current and choice periodicals on art, and stimulating books about artists, craftsmen, sculptors? You may find helpful suggestions, particularly in Chapter 17: Programs of Promise in Italo L. de Francesco's book, *Art Education, Its Means and Ends*, published by Harper and Brothers, New York, 1958.

*I do have a problem. I am presented with blind children for art—ranging from first grade through sixth. I've searched through all old School Arts, libraries, etc., with very little help. I realize they must have "feeling" projects—as collage, weave, sew, mâché, wire, clay and the like, but is it possible to get material and ideas that really have been tried, and work? I've had no experience in this area. So far, I've used finger paint—rubbing over textures. Next week we make build-up pictures with papier-mâché. Will appreciate help. I would like books of crafts or successful ideas used by other blind children with success and pleasure. I also have a supply of carving clay. Can you suggest a good use? I did mix and pour into a form such as an oatmeal box cover. When hard, take out and incise—it could be used for printing, I imagine. Is there a permanent use for it? Gifts maybe. Michigan.*

Your letter implies that you work also with seeing children. Is that correct? Perhaps you could find most help if you were to seek a list of schools for the blind and direct your question to the teachers who work with non- or partially seeing children. You are correct in feeling that much study is needed on this problem. The writings of Viktor Lowenfeld may help you—*The Nature of Creative Activity*, New York, Harcourt, Brace, Company and *Creative and Mental Growth*, Macmillan. Berthold Lowenfeld's *The Blind Child and His World* was published in New York by the American Foundation for the Blind. The blind child has many adjustments to make in a seeing world; let's give him the comfort of repetitive use of material, avoid confusing him with a great variety of things. Let him find some self-identification through modeling. Help him to develop his imagination through your stimulation. He might gain much through verbalizing about what he has formed.

Have you a question? Dr. Baumgarner will be glad to reply to your letter on this page. She does not have the time to reply directly to you, however. You understand how it is.

questions you ask



# Pretending You Know

EDITORIAL



One of the by-products of a system of education which places its emphasis on a measurable knowledge of facts and on observable results and products is the tendency of the student to conceal and cover up anything which isn't clear to him. He doesn't want the teacher to know that he doesn't know, and so he guesses and bluffs, and perhaps takes the lesser of several evils if he has the opportunity to choose which of the questions he will answer. Since our tests are used mainly to evaluate the student's learning instead of how well the teacher has taught, students come to look upon them as devices to prove how stupid they are. Because tests are his natural enemy, he seeks ways to beat the tests by bluffing, cramming, and otherwise concealing what he doesn't really know. This is not unique to modern education, although I shudder to think what will happen when facts are placed on tape and children are tested by I.B.M. machines.

Along the same vein, I recall as a high school and college student how we used to keep the book open and read the next paragraph while the teacher was discussing the previous one. This made it possible for us to reply intelligently if we were suddenly asked a question, but it eliminated advantages which would have come from listening to her discussion. All this is to say that schools, yesterday and today, produced and are producing bluffers. If the student felt free to say that he didn't understand, the teacher could promptly revise her teaching procedure. The student is afraid to admit he doesn't know, because he doesn't want to get his head chopped off. Thus our methods of harassing and embarrassing the student who doesn't know (past and present), of making a fool out of the fellow whose educational inadequacies are showing, have produced a people who pretend they know what they really do not know. Rare is the person, young or old, who can look you squarely in the eye and admit that he doesn't know, without flinching, without quivering, without embarrassment.

Too many teachers, like too many students, avoid like the plague anything they do not know. While they would not admit it, even to themselves, too many teachers have little if any art going on in their classrooms because they are afraid of it. And they are afraid of it because they have never been liberated. They are the ones who repeat year

after year the same narrow activities that have proven "successful" in the past, almost to the same day each year. Why? Because they are afraid of the unknown, afraid to expose their ignorance, afraid to admit to the students that the teacher's one small head doesn't really contain all they think it does. This deep-seated fear of unfamiliar things manifests itself in forms of rationalization, things that they think (or don't think) because it is more comfortable that way. Teachers who will have no painting in their rooms because the paint may get spilled, who will have no clay work because it is "messy," or who will have little if any art because "other things are more important," are indulging in forms of rationalization. If we could force them on a psychiatrist's legendary couch, and have their "heads shrunk," we would find that the truth is they are afraid of the unknown.

As a young teacher it was very difficult for me to admit that there were some things that I did not know. And so the temptation was to avoid the subjects and the things with which I felt insecure and go on to safer ground. With the passing of time I have concluded that there isn't anyone, even among my students, who doesn't know a great deal that I don't know. So, I have long since given up the pretense that I know everything, and it no longer embarrasses me to tell a student that I don't know, or that I have never done it. In fact, I have found it eminently advisable to say, "I don't know about that, *either*, but let's try it and see what we can find out." It will not be too shocking to today's students to discover that their teacher is not God, and it won't hurt the teacher's prestige one bit to be on the level of the learner, experimenting with the students.

That way the teacher gets smarter and smarter as new things are tried and new discoveries made. And his students are all "research assistants," helping him find out. Classroom teachers who don't know everything about art should be relieved to know that artists and art teachers don't know everything either. So, if you don't know much about painting, modeling, carving, screen printing, block printing, making puppets, or any of a million other art possibilities, don't let it keep you from trying it in your classrooms. If you get stuck, there are good books and magazines, art teachers, and commercial firms to help solve your problems. But you will learn most from the children as they work. Let them be your research assistants. I am not ashamed to admit that most everything I know I have learned from my students.

*D. Kenneth Dinebrenner*

# more than just color



Yes, Crayrite does have more than just color—qualities that ordinary crayons do not have. Crayrite Crayons blend beautifully, producing an infinite variety of hues. They have uniform texture and strength—won't bend or break easily. They are non-flaking, making them longer lasting and more economical. They are so versatile—just right for stenciling, etching and work on paper, wood or cloth.

**INSIST ON THE BEST IN CRAYONS.**

## **CRAYRITE CRAYONS**

**MILTON BRADLEY COMPANY  
SPRINGFIELD 2, MASSACHUSETTS**

**SPECIFY**  
**® Prang!**

**ALWAYS** top quality  
**ALWAYS** dependable  
**ALWAYS** uniform



*See all the exciting  
Prang Packages at  
your favorite dealer.*

*Write for new idea  
sheets. Dept. SA-110.*

**THE AMERICAN CRAYON COMPANY**  
SANDUSKY, OHIO  
NEW YORK

